



P3 Project Report

Designing a Novel Platform for non-linear storytelling of an Interactive Web Comic

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0 INTRODUCTION

India has a very rich culture of comic books. We have so many stories to tell and great storytelling methods like those seen in Dastangoi (Dastangoi, 2018), which are now lost in time. But in recent years, old comic book culture is being neglected over flashy websites and apps after the popularisation of social media and smartphones. Although we believe that traditional comic books do have a place in everyone's heart, efforts must be made towards synthesising a more enjoyable comic reading experience for the young audience.

I have collaborated with classmates Mainak Mitra and Birendra Bijoy Sing to recreate “Chandrakanta” as an interactive webcomic. Personally, I have worked on the following:

1. Weaving the multiple intersecting narratives together.
2. Making a platform that supports a non-linear narrative structure.
3. Examining the ways people experience this story simultaneously.

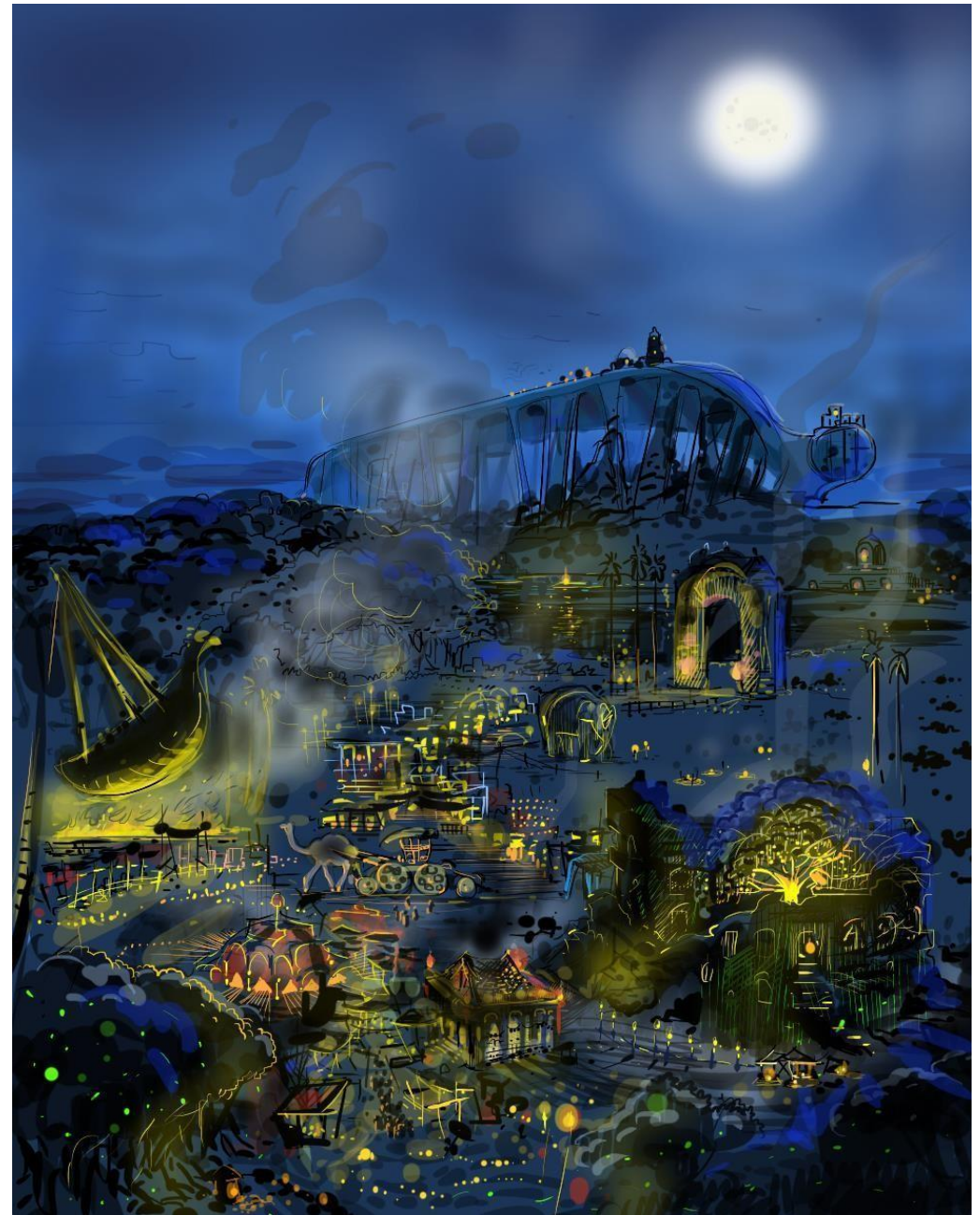


Figure 1: Fair | Artwork By Mainak Mitra

1 MOTIVATION

We wanted to promote the Dastangoi form (Dastangoi, 2018) of storytelling and tell a fantastical story that revolves around both romantic and political affairs. Rather than depending on western morals, we tried to explore indigenous ways of telling the story such that it expresses the scenarios in current India.



Figure 2: Vehicles in Chandrakanta

The broader motivation for the project is to popularise and increase the width of exposure of comics in India for everyone. We incorporated the social interactions within the comic, which can explore new possibilities for exposing a wider audience to the world of comics.

As a personal goal, we wanted to explore tools that can enable complex interactions and learn appropriate methods of usage/implementation. We ended up exploring the relatively new mediums of immersive webcomics. We have also considered the possibilities of a metaverse in this project, and as we kept moving towards Web 3.0, [3] the importance of ownership of data also became important on the blockchain network

2 SCOPE

This is a collaborative project where I, Birendra Bijoy Sing (Interaction Design) and Mainak Mitra(Animation Design) are closely working together. Although each of us will invest maximum effort into the project, our individual contribution and what we bring to the team are very different.

2.1 Art Style and Animations

Chandrakanta is set in a fantastical India. Although the world we see is very familiar, it is also very magical. It operates within the world of Tilism, i.e., in multiple layers of a magical world.

Visualising it all required the creation of numerous artworks and the exploration of corresponding motions/mechanics. Mainak Mitra has worked on developing the art style [Fig. 2] and storyboarding over the course of the project, initially imagined and titled as “Reimagining an Indian Lore as a Graphic Novel in Web Medium”.

2.2 Interactive Experience through the Narrative

We have designed the flow of the narrative, and the various interactions & micro-interactions that are justified by the requirements of the narrative. Since the project focuses on interaction, the reading experience would support various user

inputs and gestures. Hence, the reader exercises a well-balanced control over the entire experience.

I also designed the guiding system (a system that allowed a smooth flow of the narrative and guided the readers to a default state). During the reading experience, this system takes the form of the narrator. The narrator/system also acts as a visual and auditory cue.

We try to define an interaction technique which is exclusive to the Dastan format in web comics, one that will be experimental and exploratory in nature. My journey in the project includes knowing about proposed interaction techniques in web medium for laptops and phones, achieved by reading papers on interactive web comics and interactivity in a web medium, while also exploring the existing state of the art experiences.

2.3 Platform for Multiple Readers to Interact among each other

I have worked on the structure of the platform which simultaneously happened with development of the storyboard. The storyboard portrays the frames, expressions and acting, with detailed interactions highlighting the frame elements, environment, and the situation of the narrative. Along with high level interactions, care has been taken to design and develop meticulous micro-interactions that will make it more engaging to explore

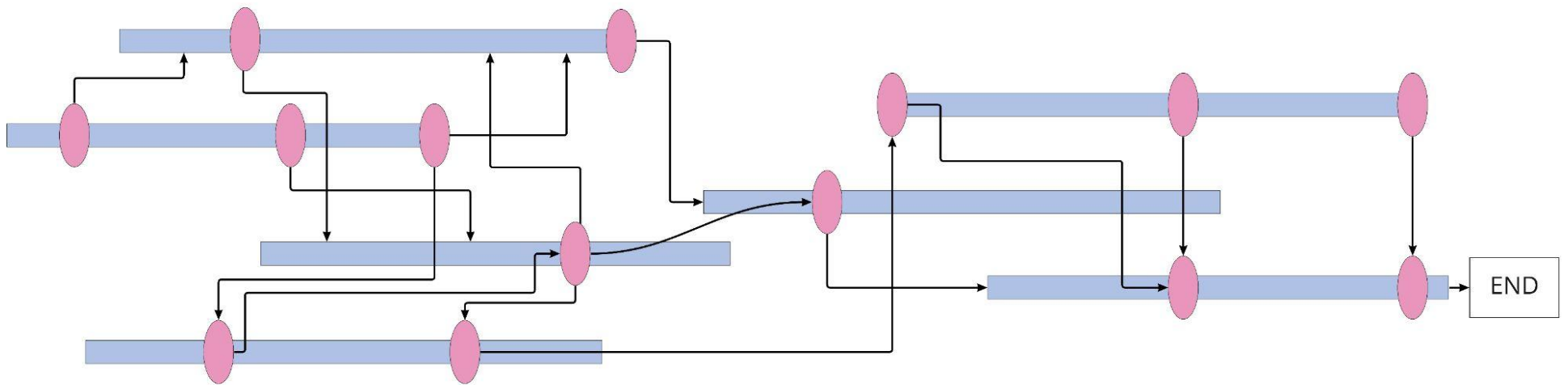


Figure 3: Initial Visualization of the Narrative Structure

sensorial inputs and outputs. To bind all these elements together an online platform, which can handle the narrative structure [Fig. 3] and make the experience of travelling through the storyline seamless for everyone has been designed.

Due to the multiple narrative structures, every reader probably might not explore all branches of Chandrakanta. But in order to tell the story, information from a different storyline is needed. Here, people will also be able to interact with the community, in turn being able to discuss & exchange ideas. Social networking capabilities would make the platform more helpful and enjoyable to the user.

The platform was designed to carry the user through the story. We chunked the content into segmented short incidents from the first book of Chandrakanta as we had to make the experience of the platform seamless, irrespective of the storyline chosen by the reader. We started off by mapping out all the stories into plotlines (using coloured strips, and then further into 8 chapters and 5 arcs). Each of the arcs consisted of a few major characters and the story was designed to be experienced from the perspectives of these characters. Whenever other characters come into the story, the narrator presents the reader with relevant background information.

3 METHOD

The graphic novel relied on a unique collaborative approach, even for its mere inception. The writing process had to be married to the imagination of the visual artist. Then came the next part, where both of these merged with interaction design. We followed a basic design method :

1. Research
2. Ideate
3. Prototype
4. Testing.

A brief synopsis of how it was done, we did secondary research, conducted field research, later brainstormed ideas, developed prototype and tested it at the end. The prototyping and testing phases were parallel and interdependent on each other, and it was an iterative process where we changed the prototype as per the results of the testing. In the process, ideation was continuously happening whenever we were in the prototyping stages.

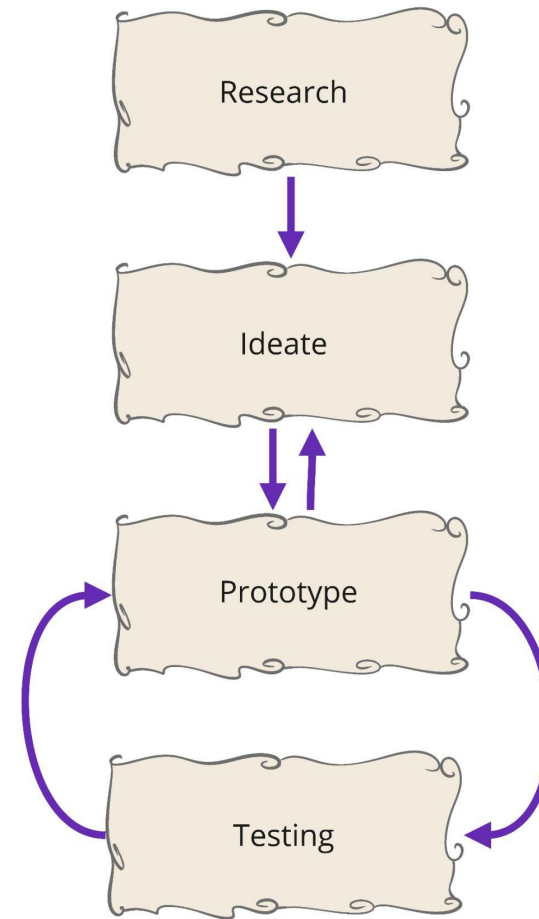


Figure 4: Method

4 THE ORIGIN STORY

4.0 What we know

In our case, the story was written as a collection of many plot lines, and their narration is filled with great details. The initial conceptualisation has been in progress ever since the writing project commenced. First, we explored the problem space by examining the key characteristics of Chandrakanta as a Dastan and got ourselves familiar with the story and the Tilism world of it. We also examined the narrative structure of the story.

The groundwork for this project, which also served as one of the major motivations to pursue it, had been laid by Mainak Mitra for a little more than three years. His work included the conceptualisation of the project and initial storyboarding.

Our further aim here was to familiarise ourselves with the story and the world of Tilism. We had to fix our mediums and target audience. We also broke down the story into different narrative structures.

The groundwork consists of the following three main components, Chandrakanta- the story, Dastangoi- the storyteller, and Tilism- the genre.

4.1 Chandrakanta

Chandrakanta was the first modern Hindi novel published in India in 1888, followed by the sequels named: Chandrakanta Santati and Bhoothnath. It has been rewritten to fit into the contemporary Indian context by Abiral Kumar, who teaches at St. Stephen's College, Delhi. Abiral is also pursuing his PhD in Tilism. In his M.Phil dissertation, he researched and criticized the original work by Devki Nandan Khatri. Abiral took the three-part story of the main book (Chandrakanta) and re-wrote it into another three-part novel, initially designed for the graphic novel medium.

The groundwork consisted of the script, and as a part of this project, we further worked on the first book of the story, which is based on the Hindu dominant culture. The magic of Tilism is to marry this concept to the scientific discoveries of the 19-20th century, thus making the Dastan modern to suit his time. We are reading the story from today's perspective and are using the same techniques as Khatri, suiting our own times (regarding progress in science and society). Chandrakanta (Khatri's novel) is a mix of Dastan and Upanyas (one of the first Indian novels).

4.2 Dastangoi

Dastan-e-Dastangoi [19] is a Persian Storytelling technique. There are four pillars of a traditional dastan, namely razm (war), bazm (court), tilism (magic), aiyari (trickery). It was majorly popular in the Northern part of India in the 19th Century. Akbar the Great had commissioned artists to create illustrations that would assist the performance of Dastans. Hence, it is a performing art where a narrator directly interacts with the audience. Sadly, this art style has become extinct from our contemporary culture. However, a few theatre practitioners [23] (Mahmood Farooqui & Darain Shahidi) have made attempts to revive it.

4.3 Tilism

Tilism is a Parisian Magical Structure. The art style is almost miniaturist. It is a magician-made world with different layers in it. The layers are as follows:

1. Zulmaat – the darkness – which comprises powerful people and is extremely hard to attain.
2. Baateen – the intermediates – which is hard to reach for the Zahir.
3. Zahir – normal people, this is where our story breathes, where our title character Chandrakanta reaches the Tilism.



Figure 5: Vijaygarh art by Ruchir Sonar

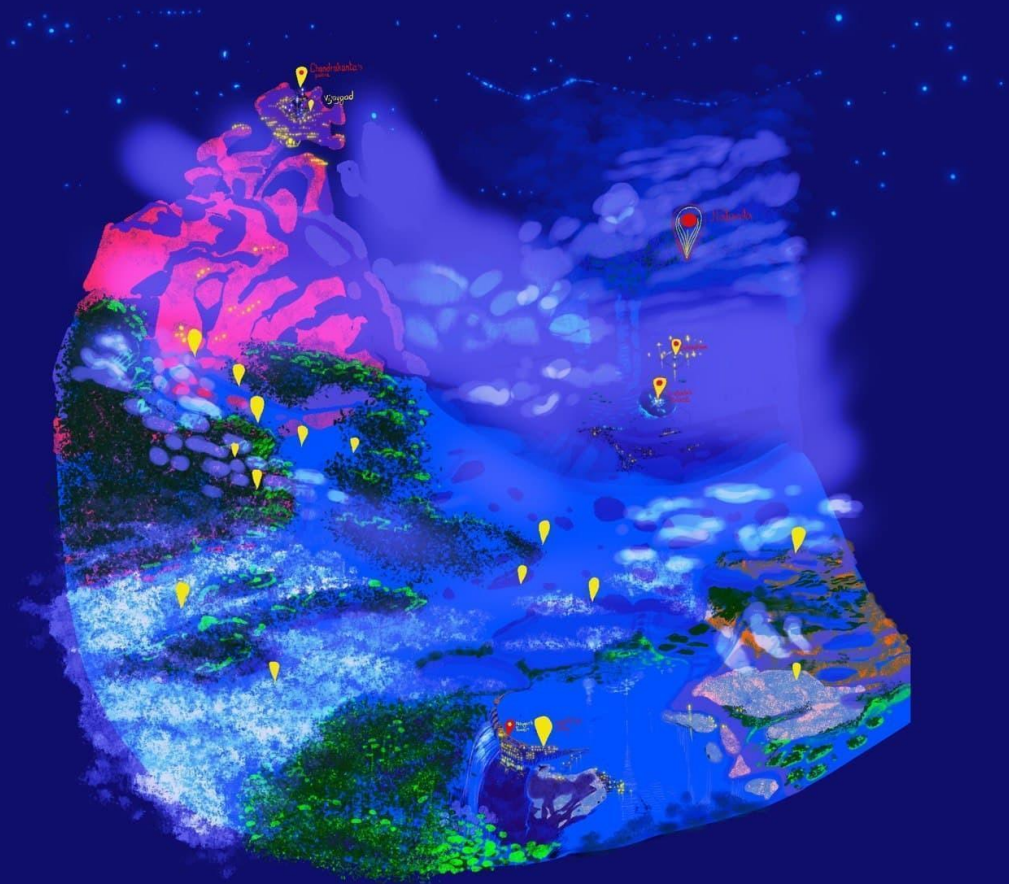


Figure 6: Map Version 3 Night

5 THEIR AUDIENCE OUR AUDIENCE

Dastan was often held in the Sakikhana [1] (public gatherings), and naturally was designed for idle crowds. Providing an experience of fantastical adventures through Tilism was a classic way of depicting a political drama. Similarly, our platform is targeting a general web audience. Although, while broadened up, the target user groups are those of people who consume cultural commodities like anime, manga, OTT or simply literature. The sheer nature of a Dastan probably encompasses many genres, thus engaging different cults.

6 SECONDARY RESEARCH

We started off by studying contemporary works available on the internet.

6.1 Webcomics

State-of-the-art examples include Murat, Neon Wasteland, and Bottom of the Ninth. These showcase a spectacular mix of traditional comic panels and the multifaceted web medium. We found some in Dsource, Behance, Github and others were available for sale on the internet. The popularity of web media among young adults has peaked as they offer a certain degree of immersive experience using a mix of 2D and 3D. Other examples include drengexplosion [25]. In Dsource we also came across Parallax Motion Gif, New Forms of Reading Technology such as Online Comic Readers which captivate a large audience and

Interactive Comics which include Motion/Animated Comics and Hypercomics.

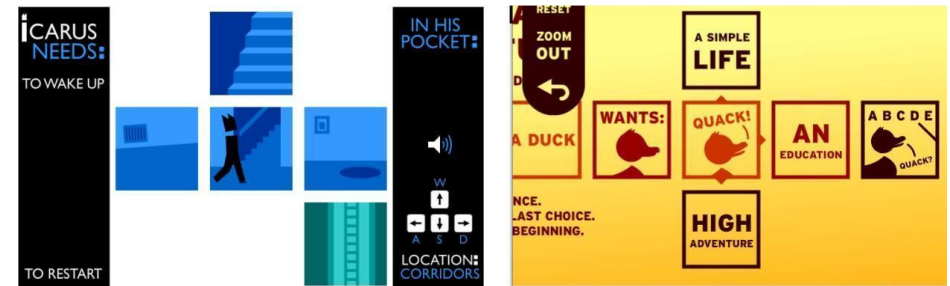


Figure 7: Hypertext Fictions

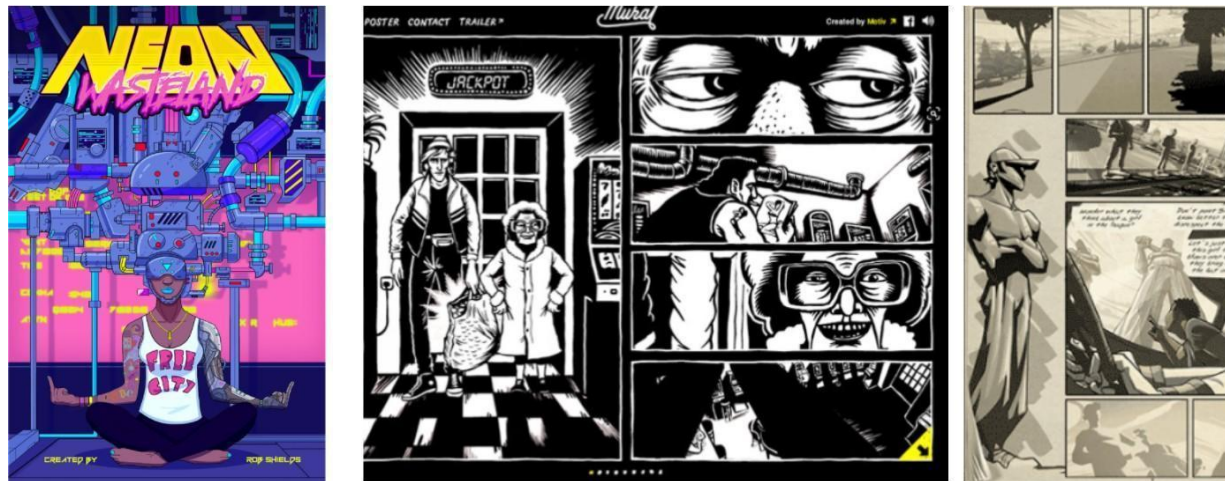


Figure 8: Webcomic Examples

6.2 Hypercomics

A hypercomic can be thought of as a webcomic with a multi-cursal narrative structure. In a hypercomic the choices made by the reader may influence the sequence of events, The outcome of the events or the point of view through which events are seen. The same can be said for Hypertext Fiction which is a similar electronic literature and brings in the context of non-linearity.

The beauty of these experiments lay in how a complex narrative was intertwined in different storylines, making the complexity of the narrative evident on zooming out.

Next, we looked into some unique and inspiring web narratives like My Little Storybook[27], Nomadic Tribe[28], Prometheus Fuels[29], the bear and his scarf, the story of Babushka[30]. These are some interesting mixes of 2D and 3D elements to create an immersive experience through narrative strength and exploitative web techniques through interaction and micro-interactions. 'My Little Storybook' shows the delicate touch of narrative through frames resembling the comic panels and bonding it with an interactive experience. Similarly, 'Nomadic tribe' shows an interesting mix of traditional comic panels and interactive fun activities. 'Missing' web narrative portrays an interesting experience where the story progresses even when the person is idle, which we felt was a middle ground between film media and comics.

6.3 Graphic Novels

Looking at the panels we then went through some of the current popular graphic novels that are available currently in the market, these novels are best known for their experiments with unique panels and exceptional storytelling technique.

We went through some papers which were related to the depiction of graphic novels in a visual and interactive fashion. We came around the concept of a master narrative and counter-story [6], while also understanding concepts like narrative gerontology, which deals with exploring the metaphor of “life as story” [5].

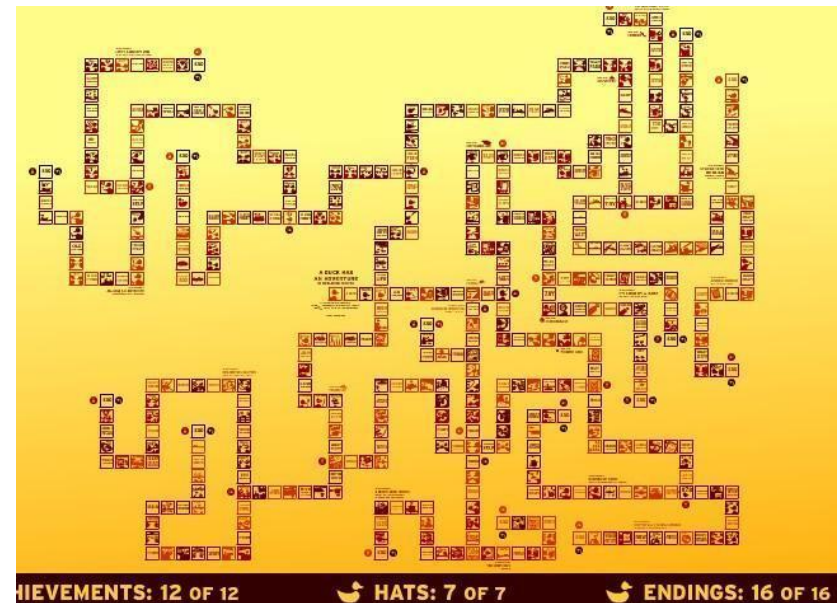


Figure 9: A Duck Has An Adventure | Storylines overview

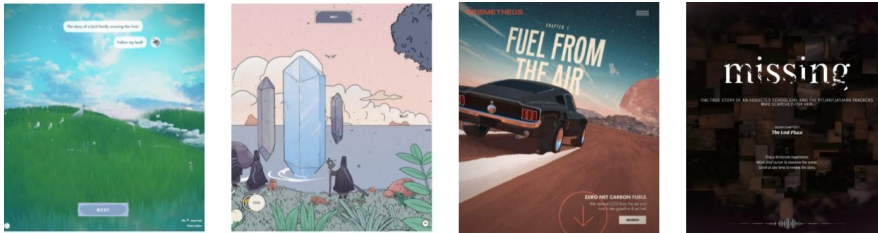


Figure 10: Experimental Narratives

Another major discovery was that of Communic, a system that uses comics as a medium to create Narrations. Further study shows how a collaborative application engages two authors, which gave an interesting insight into how we can use a collaborative

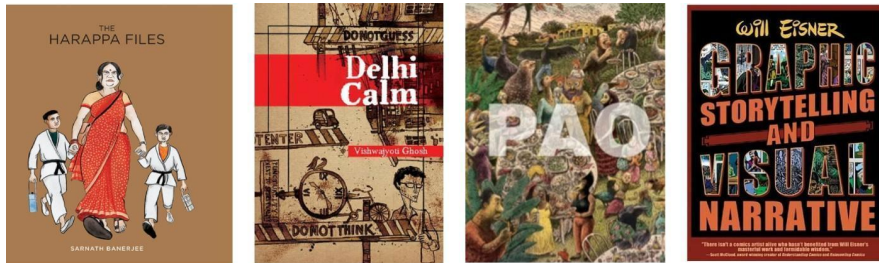


Figure 11: Books on Graphic Novel



Figure 12: Axie Infinity

platform to engage multiple people at the same time. This serves our purpose of reiterating Dastan's important aspect, the court of people experiencing the story from a Dastangoi (narrator) at the same time.

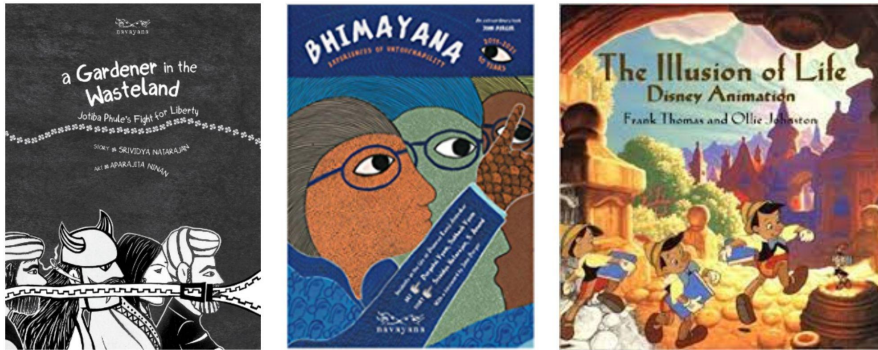


Figure 13: Graphic Narratives



Figure 14: Sandbox Alpha

6.4 Gamified NFTs

Non-Fungible Tokens (NFTs) are a type of cryptocurrency [35] that live on the Ethereum (ETH) blockchain network. Efforts have been made to gamify it to create a Play to Earn (P2E) environment. Games like Axie require you to own an Axie NFT [Fig. 13], Sandbox [Fig. 14] to play the game. Or we have online clubs for the people who buy an NFT from a collection like Bored Ape Yacht Club, World of Women and so on. There is good scope for social networking possible over these as well.

7 MAPPING THE STORYLINE

We had the content segmented into short incidents from the first book of Chandrakanta. As we had to make the experience seamless irrespective of what storyline the reader chose to follow. We started off by mapping out all the stories into plotlines (colored strips in [Fig. 15] and then further into 8 chapters (combination of strips).

We also mapped out the sections we might want to show to someone who is getting info from other timelines and exactly what not to show as well.

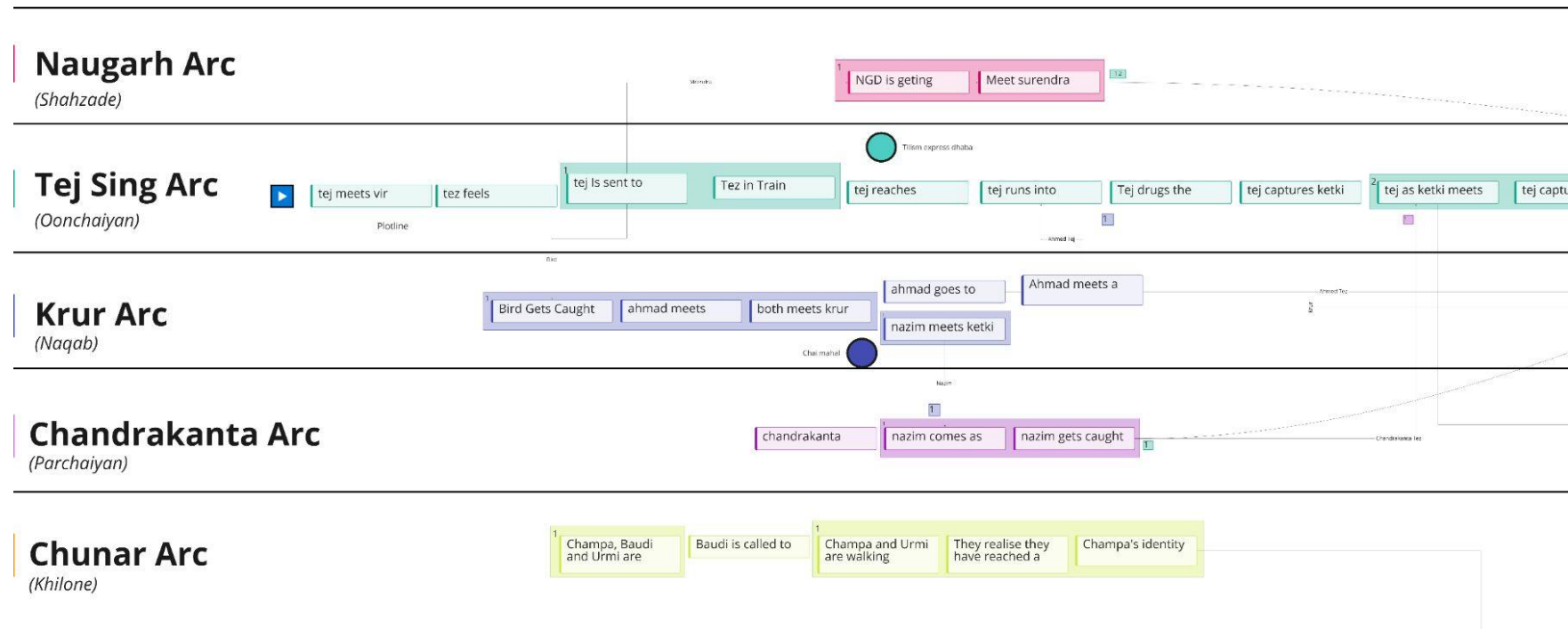


Figure 15: Storyline Structure

8 IDEATION

We needed to find novel ways of interacting with webcomics and needed to make the platform that would hold the comic. We also needed to consider the technical side (actually executing the project). We had to work on a modular structure that would help people swiftly enjoy the experience without the need to read everything. Parallely, we had to work on how the change in point of view would be experienced. The narrator is also an interesting opportunity to work on where he guides the reader throughout the story. We also needed to consider the visual styles in terms of characters, environment, props etc., and the level of interactivity

thereof. The goal of the ideation was to retain the flow of the literature such that the final experience could be guided while being immersive. However, the medium had to be self-conscious (as in the narratorial device had to remind the experiencer that they are following a story).

For the above-discussed reason, there was a better chance for us to create a detailed and up-close portrayal of the people in this story, enabling us to tell the human side of the character, which is an important vision for our restructured lore.

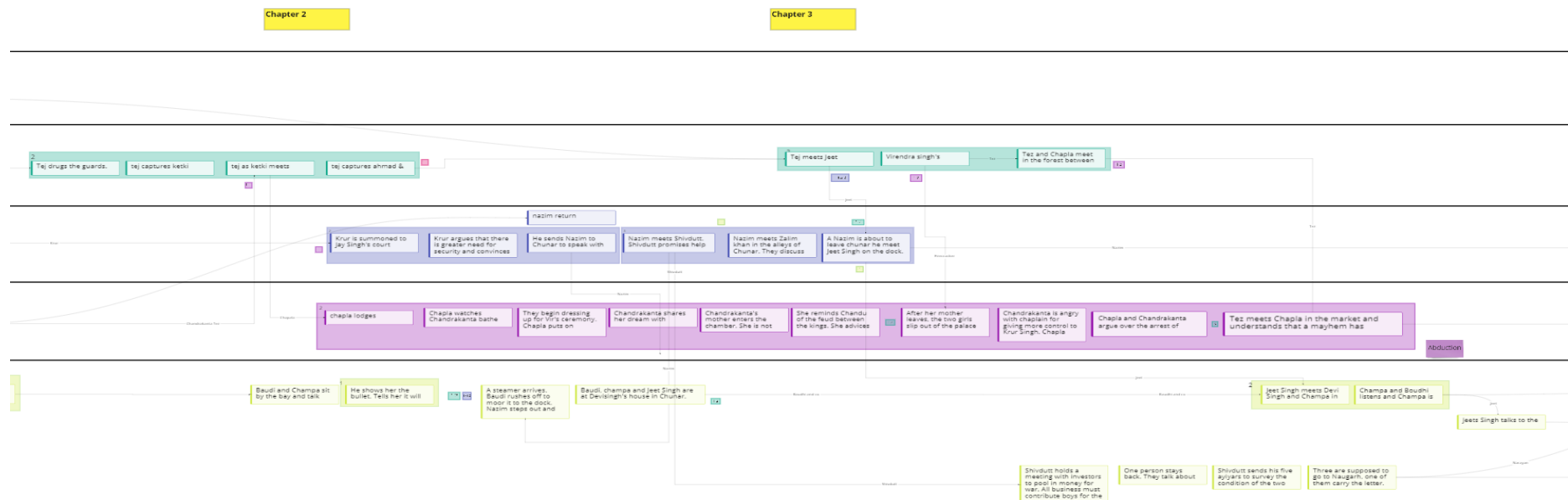


Figure 16: Further Storyline Structure

A multiple narration technique is a novel approach that we tried to incorporate here. It is an experiment where viewers shall have to choose from two or more storylines of different people in different places. These plot lines do not interrupt each other but may cross paths. One has to complete chapters to proceed in the narrative. A viewer or a group of friends may read through these plot lines and save their progress. Co-readers can see other readers' progress, interact among them and even leave a secret trace on their way so that when the other reader reaches a particular instance, s/he shall find the message.

We also checked if the story can be experienced from multiple perspectives. So far, we have looked at it from the perspective of the three cities, with their unique biases and cultural diversity.

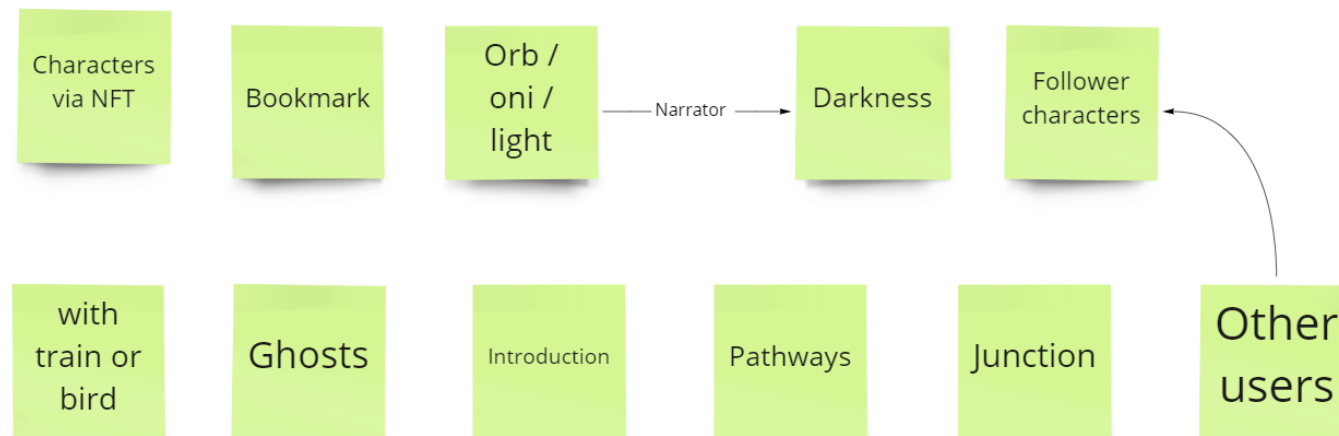


Figure 17: Early Ideation

8.1 Information Architecture

The information architecture of the story is quite complex. We follow the characters to stitch their stories together and bring all the Dastans together. The platform also has different places for the community to interact with it and among each other. All those needed to be sorted so that readers could easily navigate through them, and the mental model of the platform should be clear.

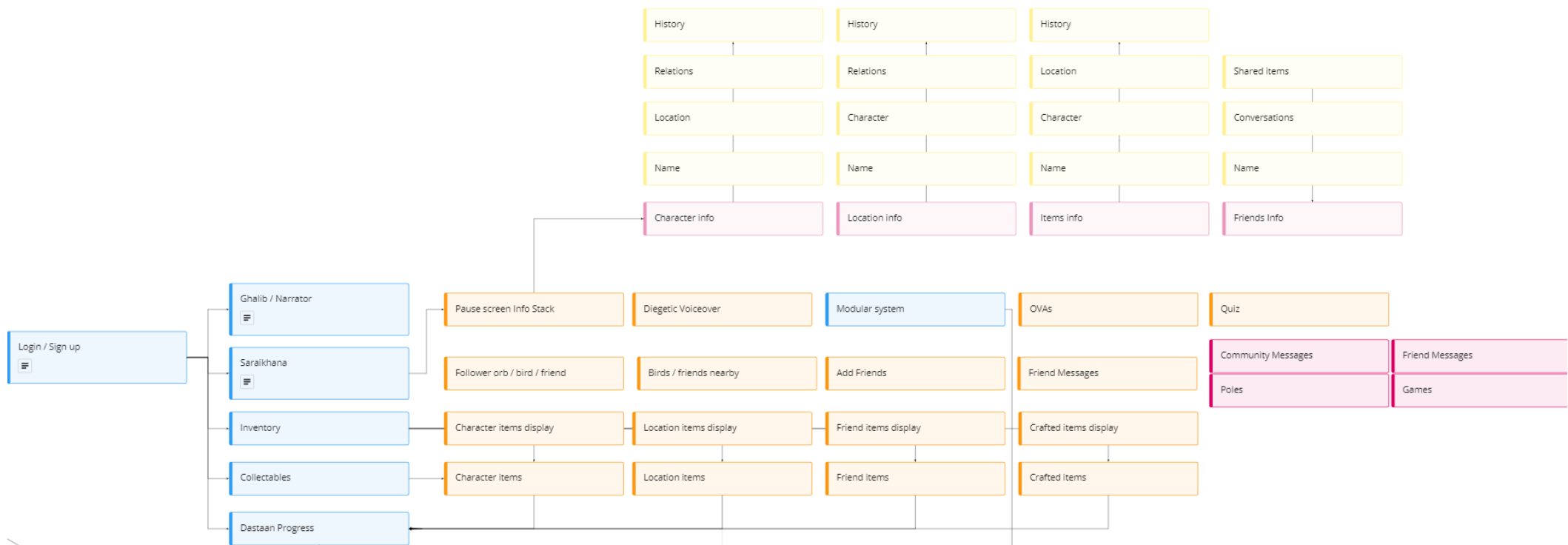


Figure 18: Information Architecture

8.2 Platform

The platform is being made to revolutionise the comic book reading experience. We have been reading comic books since our childhood. The experience of the actual comic book is something very different from any digital medium. Just converting frames from physical graphic novels to digital webcomic will not do justice to the capability of even the minimal smartphone. We are trying to enhance the experience of digital webcomics, and we want people to talk about it. We want this interaction to happen between fellow readers and friends because the story is quite big, and we have to make it easier to grasp even if you are just sitting back and watching. Discussing with friends will make the story easier to understand. The goal of the platform is exactly this.

1. Multi Narrative (Dastan) Progression: For better understanding, we divided the story into 5 Dastans. There are multiple Bayaans inside each Dastan. The path one follows in our Dastan will be unique and is not reversible. However, they will be able to go back and check that storyline later—the micro-interactions of changing the storyline in both laptop or portable mobile medium. For our first playable prototype, we are building it for only laptop screens but keeping in mind the interactions should translate to mobile.

a. Saraikhanas

The pause screen is where you take a break from the story and interact with the community. You will have multiple

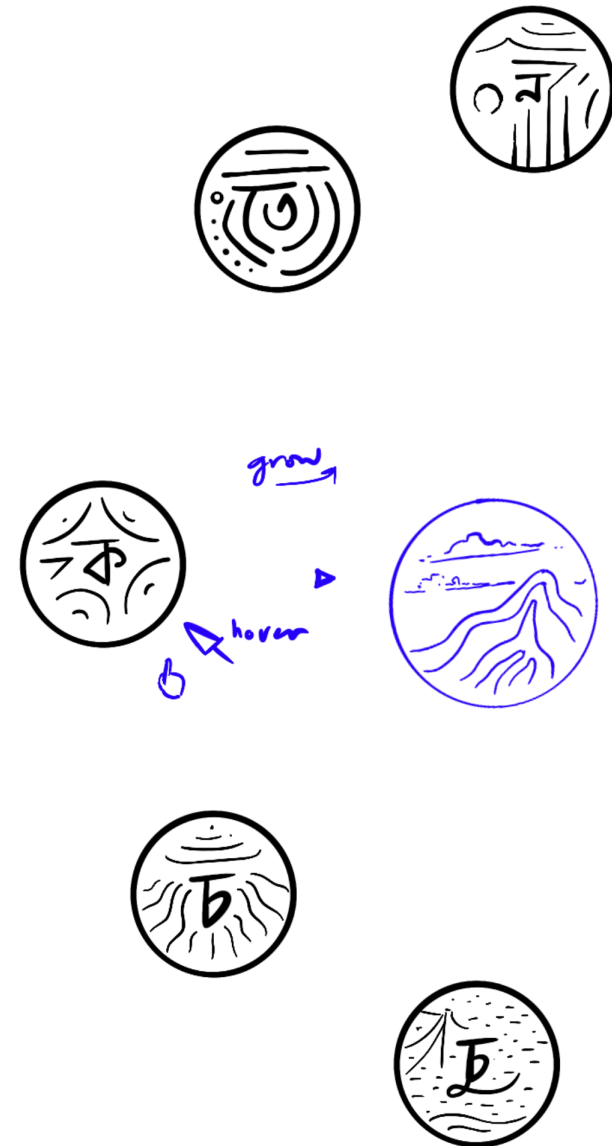


Figure 19: Changing Storyline

interaction points around these places. These places are diegetic places around the map of Chandrakanta. It is placed around Naugadh, Chunar, Vijaygadh, tilismi jungle and mountains, places around the map where common people generally hang out. Here your mouse will be followed by an orb, more about that later. Readers will stop here and can know the story better by interacting with others.

b. **Information Display**

All the characters, locations, and objects have so many stories to tell. On the same Saraikhana screen, we will speak about those in short so that readers always have some context in this colossal story structure. The display of this information should feel more diegetic and similar to the experience of the story. With time these stories will also change as the story unfolds!

c. **Story Progression**

The reader should be able to keep track of the progress of the multi-narrative structure. But including all the plot points, it will be difficult to keep track. We have mapped out the multi-narrative structure in five Dastan and multiple bayaans inside them. These data will be visualised like the connection of Strings. Your bird sits on the string where you are now.

d. **Orb**

While you are reading through the comics you will see other friends who are online and can interact with them while reading. They will also be shown in the saraikhana section,

where you can access the full experience. Around the saraikhana, your avatar's orb will be floating around, following your mouse cursor. Depending on your avatars and their speciality and rarity, the light they emit will be different and change as you change your avatar. These craftable motifs have an opportunity of showing off readers' exciting collectables.

2. **Community** The readers' community can emerge fantastic ideas among friends and like-minded strangers. Sharing your thoughts on the story can be one of the ways of starting discussions. Regular lores and quizzes, and quests will be available regularly. As the different lores come, perceptions about different characters, events, location will get clarified. As people are reading different Dastans, their empathy towards different characters will be different. So these lores will question all of them about the conflicting part, hence the community will also be triggering the important conversations.

a. **Friends**

You can read the story alone but it's always better with friends, you can invite your friends to enjoy the experience. They can discuss the stories and play side games together. They can also exchange their collectables. We are keeping the NFT feature in future opportunities and it has huge potential.

b. **OvAs**

On a regular basis side stories that reveal more about main characters will be published. These stories will ask critical questions about what makes or breaks the character.

Ghalib will be presenting these extra contents. They will be shared with the community, and will be open to discuss and take part in.

c. **Quiz**

There will be quizzes in the community that people can take part in. Our prediction is there will be conflicts of opinion about different events in the story. The quizzes will reward you with collectables and the story of that collectable along with that depending on what you answered.

d. **Games**

Like the quiz there will be mini multiplayer games. New ones will be available to play regularly over the year. These games itself will contain new stories from tilismi world. We will ensure to keep the Dastan format of storytelling through a diegetic narrator.

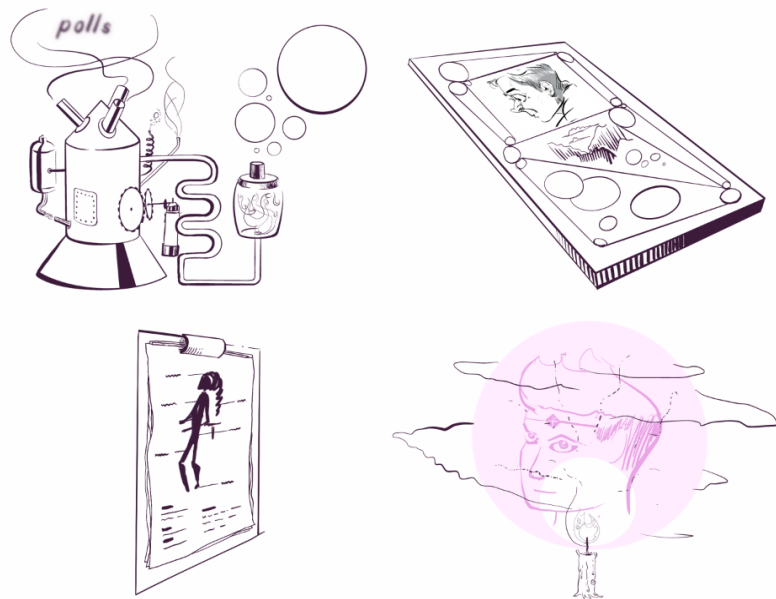


Figure 20: Community Ideas

Modular (Bayaan) Structure is also something we fixed on to make the experience seamless. The bayans are layed on the way of the players. We can easily go back and show relevant information when a character enters from other Dastans. This way we do not have to look at the whole story; rather the important parts are already handpicked for the reader.

e. **Flashbacks**

As the players select one of the Dastans to progress through, they will leave behind a few stories from different characters. So when they meet again with that character, they will narrate how far they have come from that last meeting point. This is the fun part of the modular system. We can pick any Bayans from the past and show it through the narration of that character.

f. **Narrator**

There are two types of narrators in the experience. Ghalib is the most prominent and important one. He himself is a character from the tilism who stays outside the bubble and sees over everything, he appears inside the story as well in the form of a cat. Birendra is working on the detailed storytelling technique of Ghalib in a Dastan structure. Another one is the character who is telling something from the past will also narrate it.

g. **Transitions**

There will be transition points where a story splits to more than one direction or in any instance, getting a recap from another storyline. The transition should be clean and smooth and feel refreshing to have a different perspective.

3. **NFT opportunity**, as the players are creating stuff on our platform and creating stories, characters, objects and much more it can be part of the blockchain system where on the platform your nft will get you unique skins and cosmetics in the game. As it will be a play-to-earn system, For now we are keeping it as a future feature scope. Alternately;

4. **Earn items:** As the story progresses, players get familiar with the characters, locations and objects of the tilismi world, and they will get different Ganjifa Motifs related to the Dastan they are in. These are the earnable cosmetics which carry a lore from the story.

a. **Collectable Ganjifa Motifs**

As a reward system among the readers we are presenting the Ganjifa motifs, each one of which carries an important lore. These Motifs including the lores will be available to collect from time to time on the platform.

b. **Rarity**

The more interesting complex lores are hidden behind rare ganjifa motifs. The stories might include interactions, animations and more. They will look more attractive than the more common motifs. This rarity will reflect in the trail of the orbs around the saraikhana. The rare ones make special trails behind them.

c. **Lore Reveal**

The lores behind the ganjifa motifs will be revealed only after taking part in that related quiz or OVA or discussion. If you give the right answer you will get some of that motif. So

having a clearer understanding of the story will give you an upper hand in this comic.

d. **Character affinity**

As people go around reading the story, they will be attached to a few characters more than the others. Which may result in biases in the games

5. **Crafting** These cosmetics of the platform will get you creative in the crafting section where you can make your own stories, characters, objects and much more! These can be shared and further continued by others as well! After this it is upto the user's creativity to create their own tilismi world.



Figure 21: Ganjifa Motifs

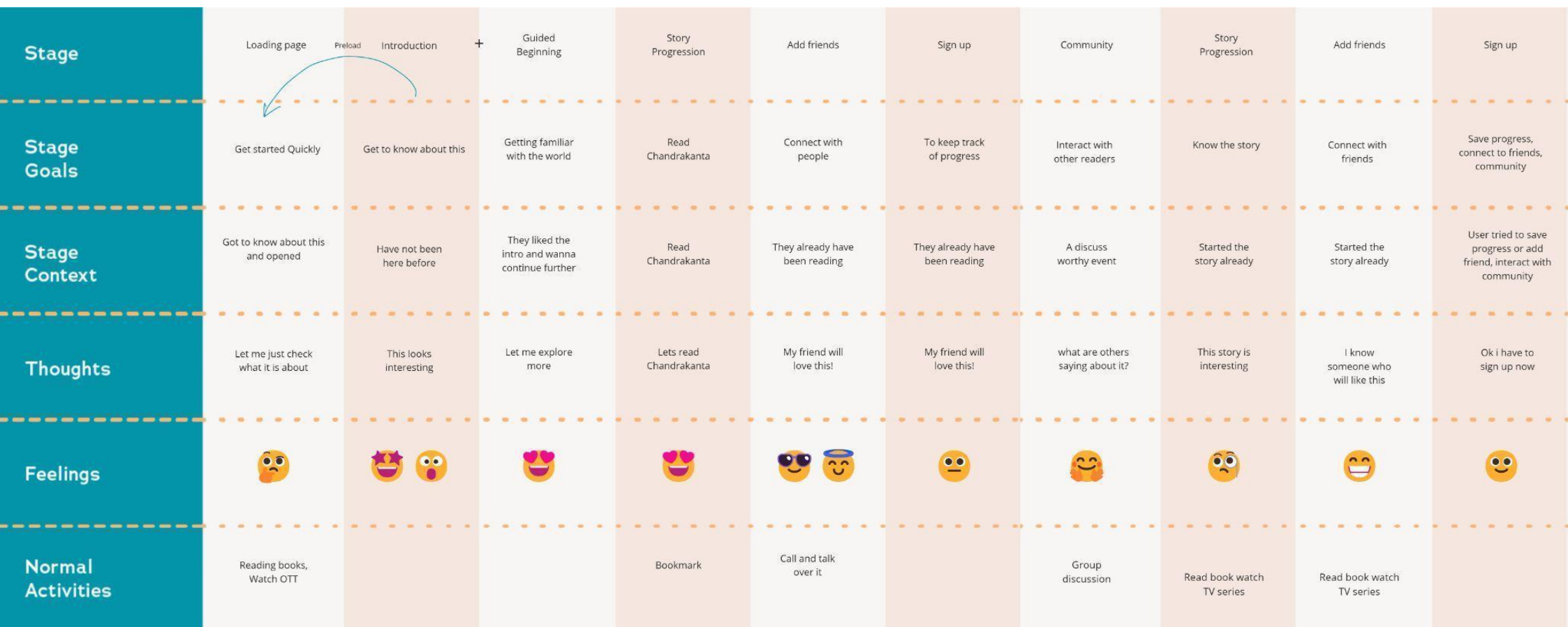
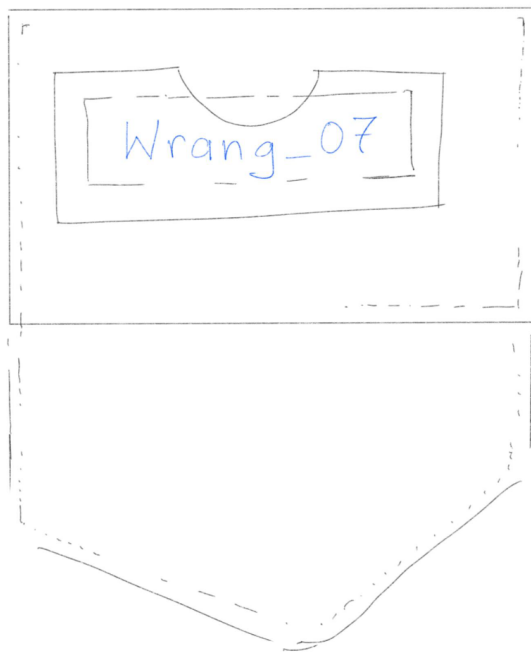
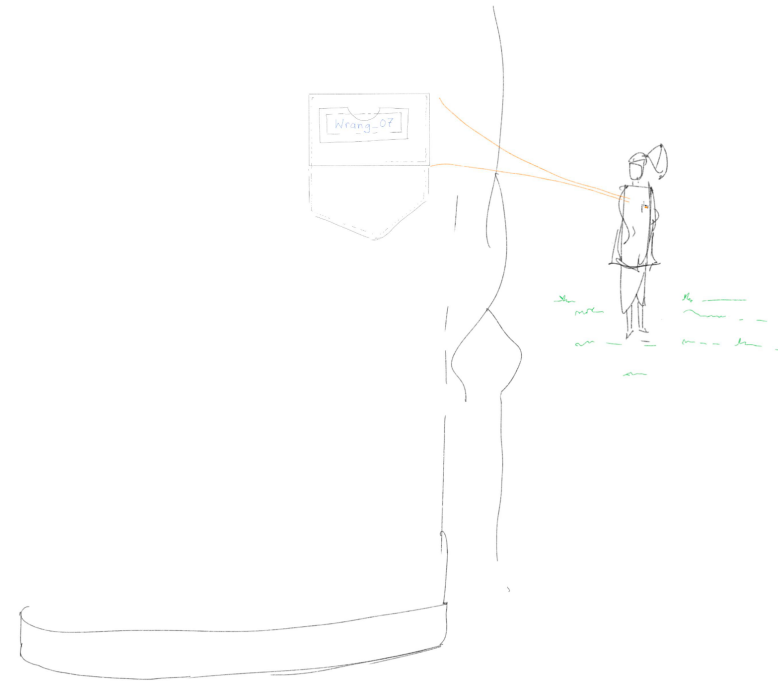


Figure 22: User Journey Map

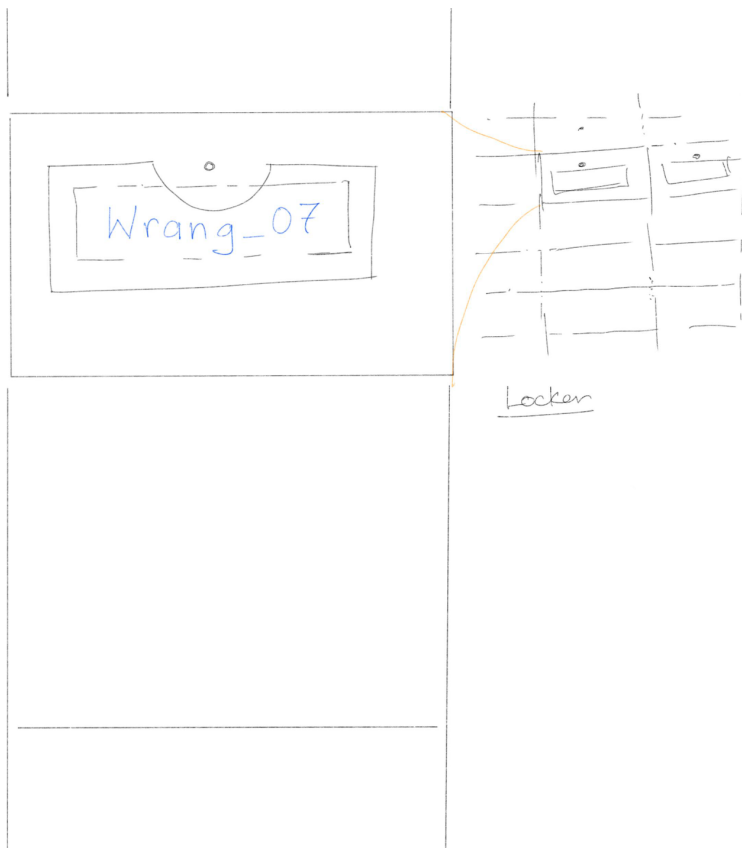
The primary storyboard is made on Procreate by Mainak. Depending on that scenario, Birendra has added interactions and microinteraction that will make the experience more immersive and interactive. After multiple layers of interactions to accommodate all these and the multiple narrative progression with friends I will be working on the platform and the narrative structure. Here are the screens of the platform.



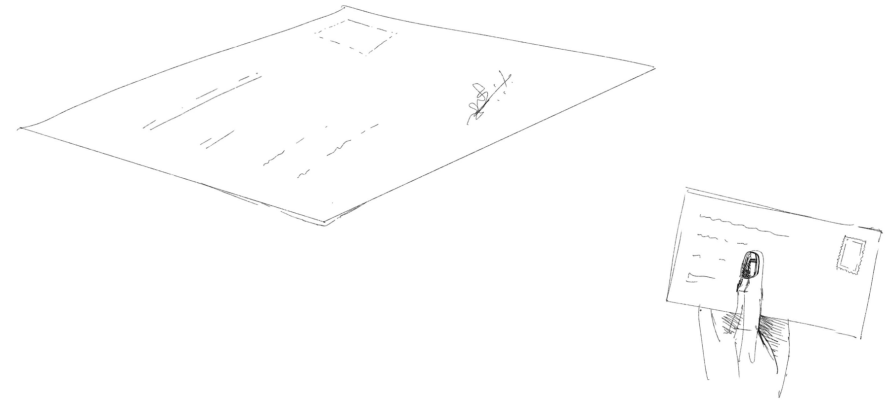
Name tag



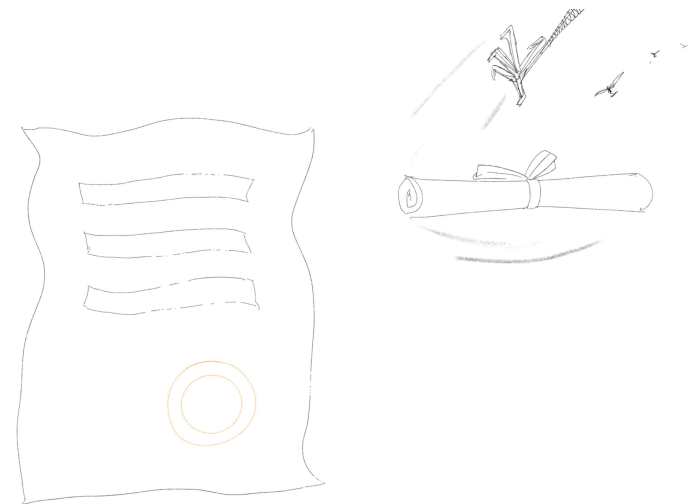
Locker



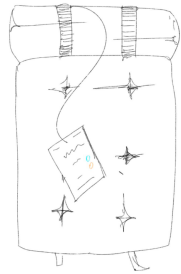
Letter



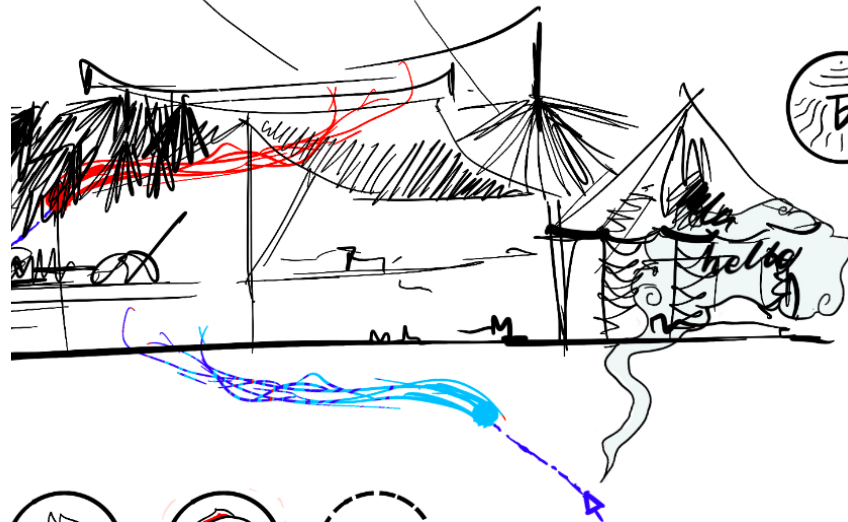
Invitation



Bag Tag



Journal



Pause Screens

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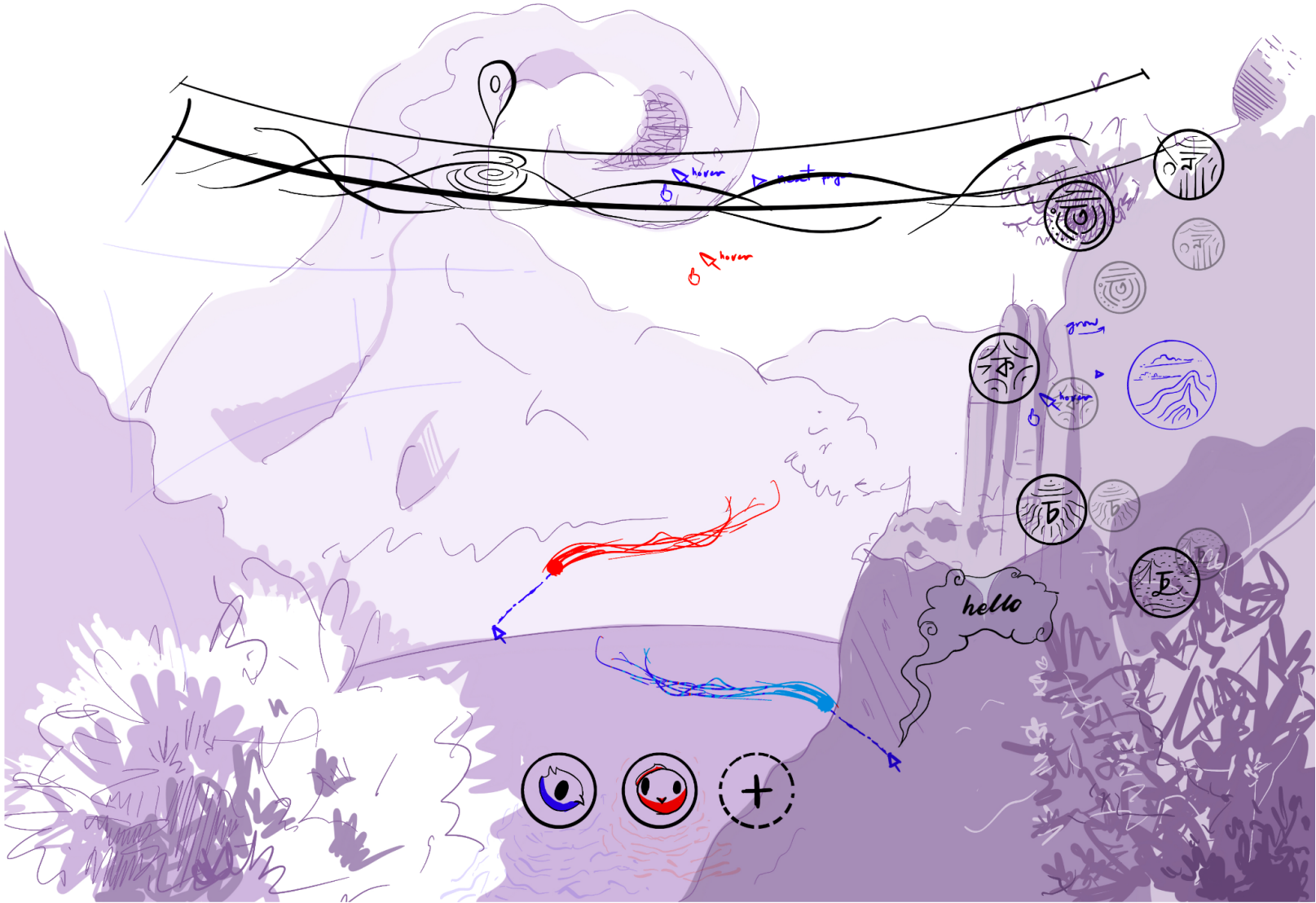


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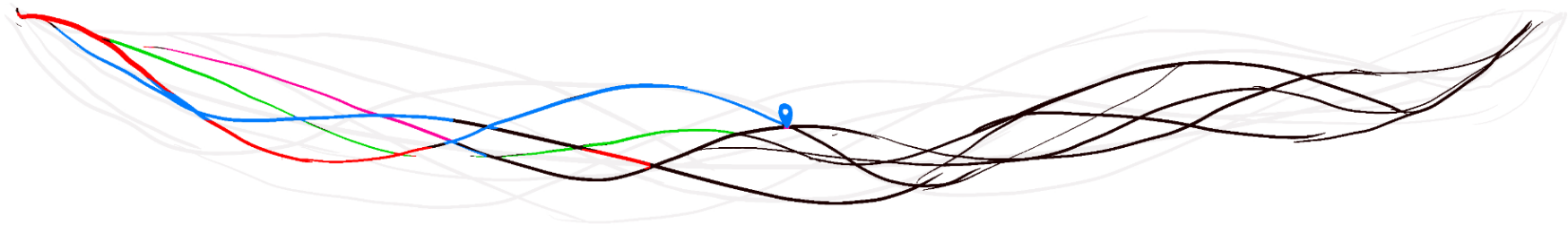
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Friends

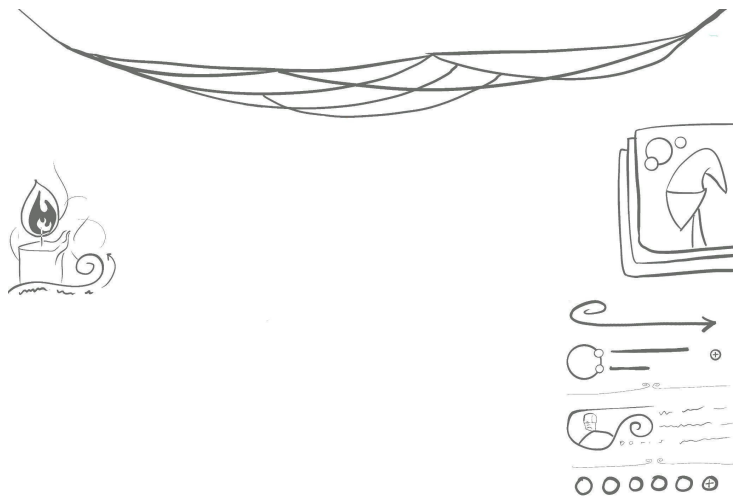


8.3 Timeline artstyle

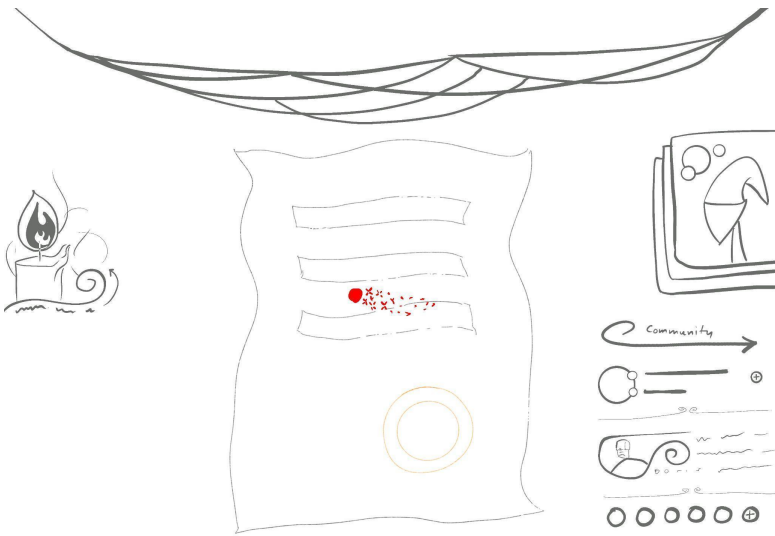


8.4 Wireframes

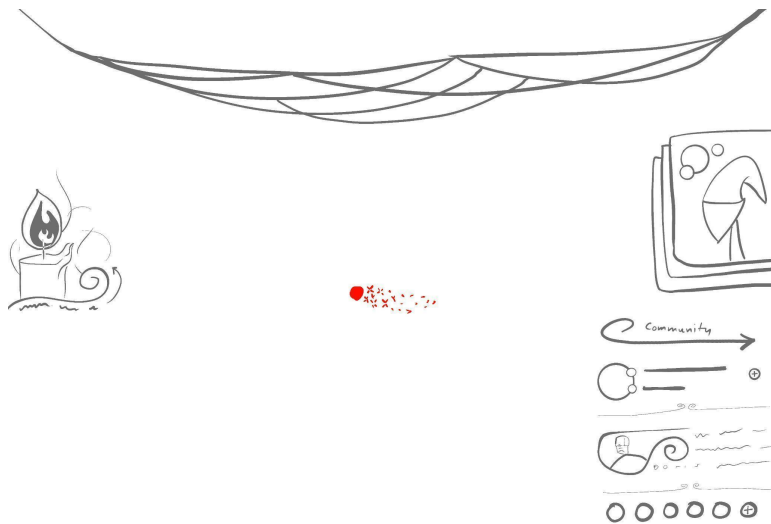
Saraikhana elements



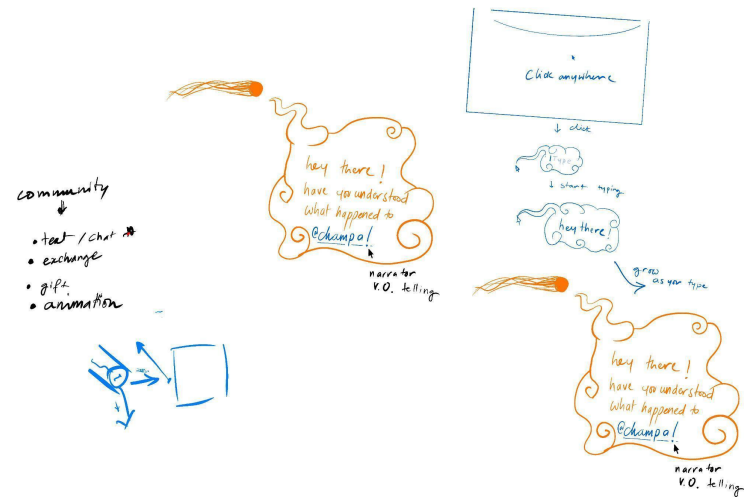
Login page



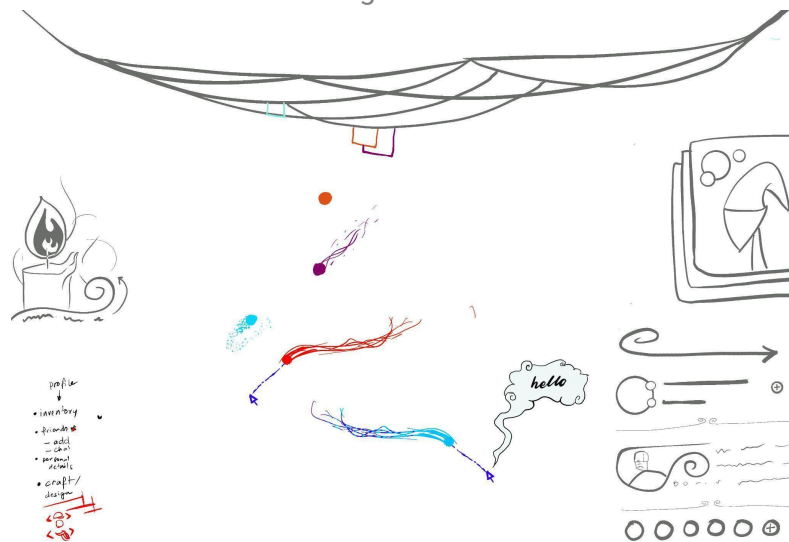
Reading alone



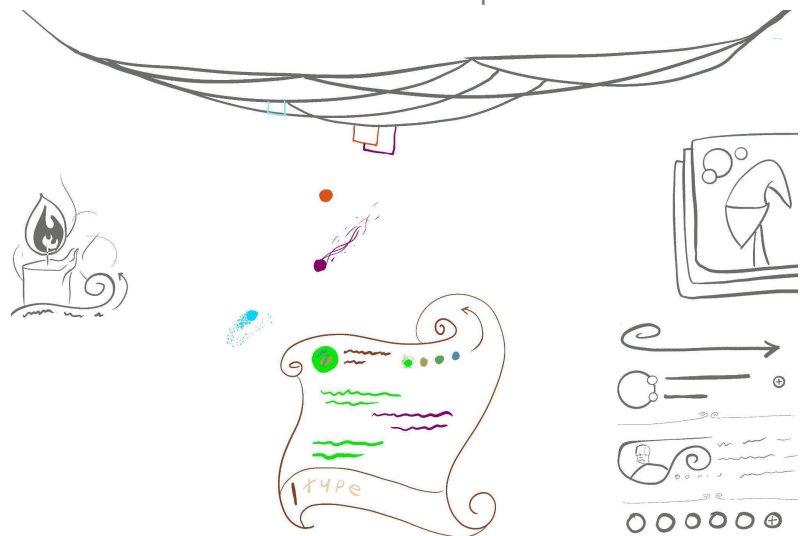
Reading with friends



Chat with a person



Chat with everyone



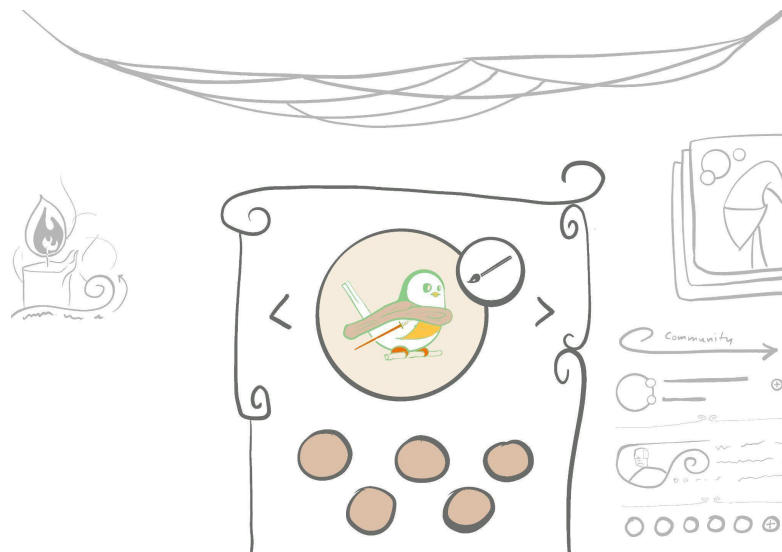
Add friend



Profile



Motif Selection



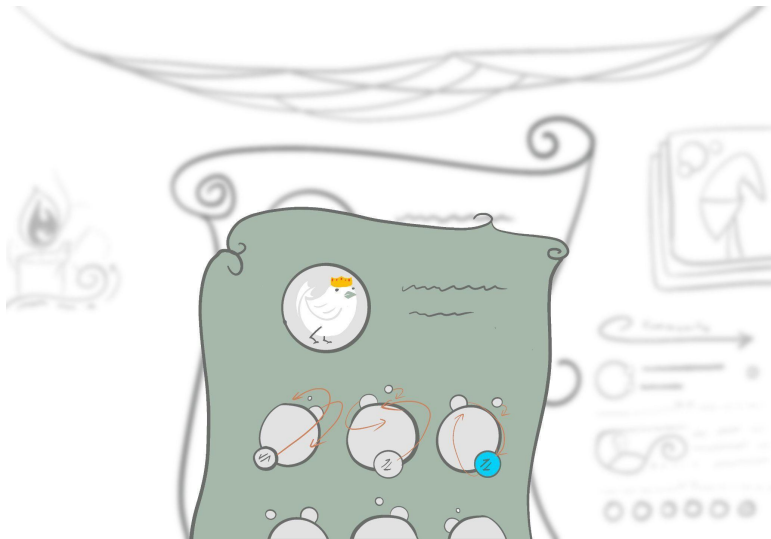
Motif creation



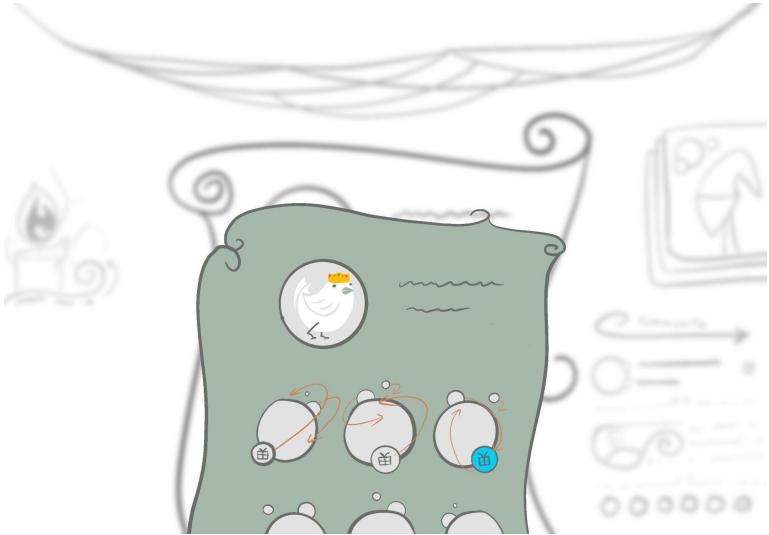
Friends' profile



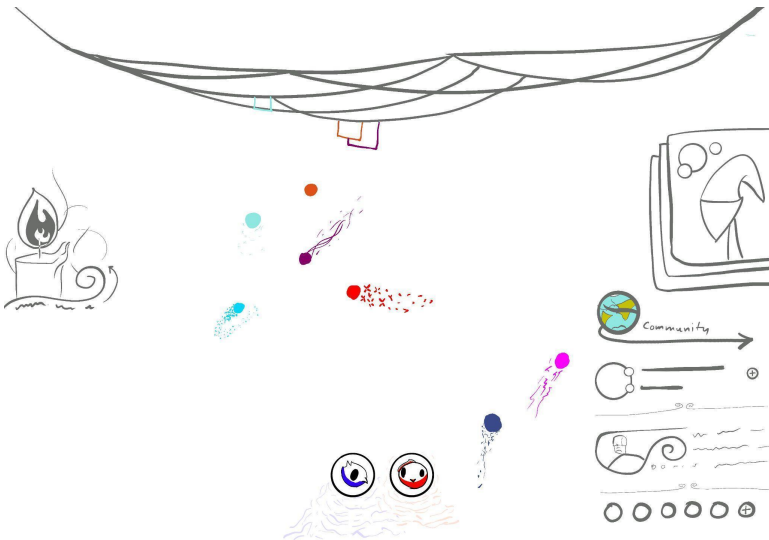
Exchange motifs



Gift motifs



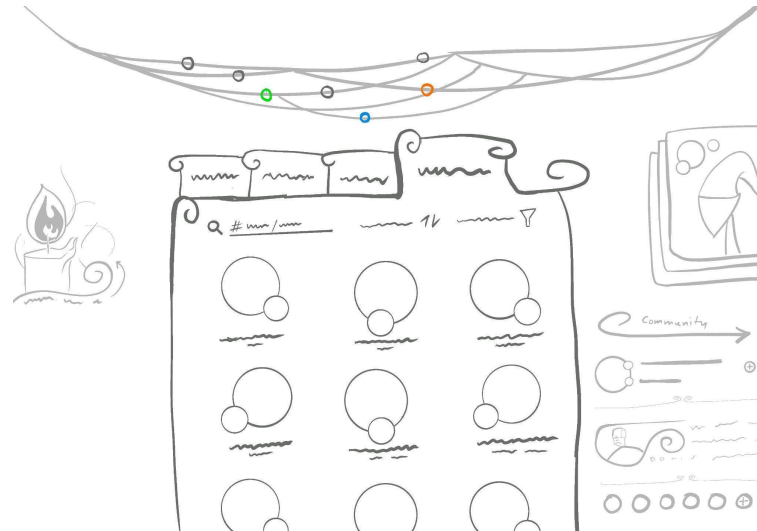
Global Section



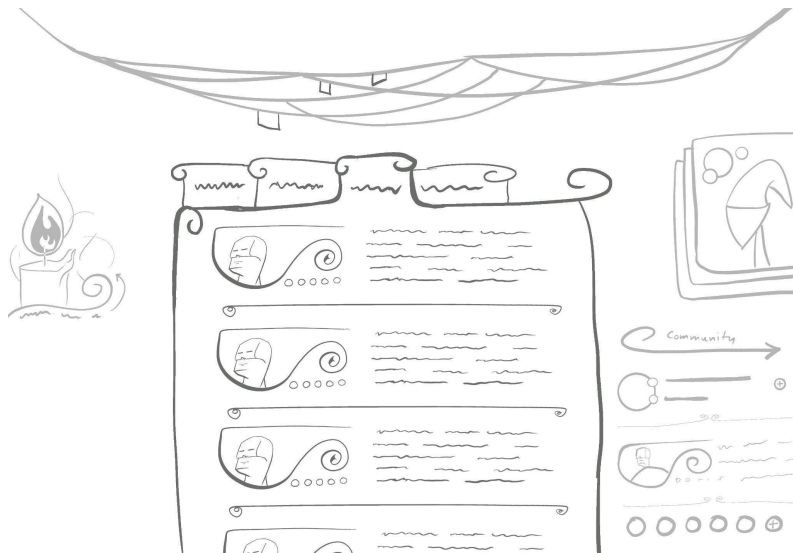
Community highlights



Friend List



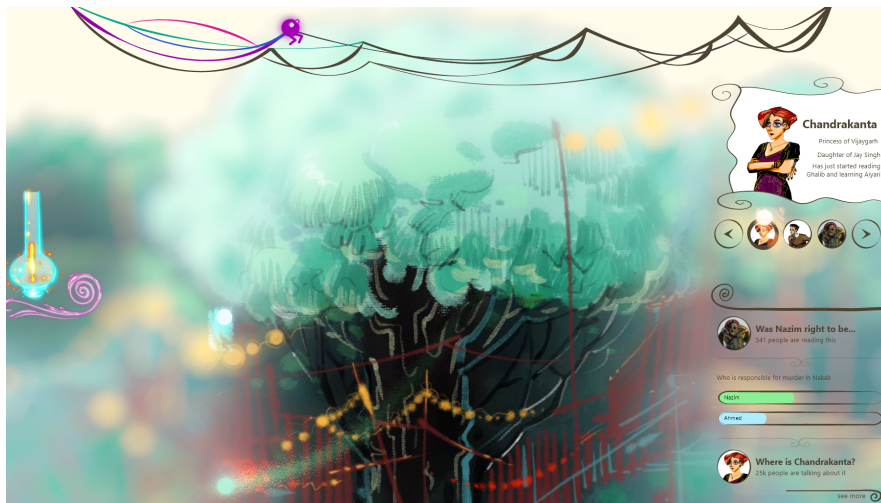
Polls



9 LOW-FIDELITY PROTOTYPE

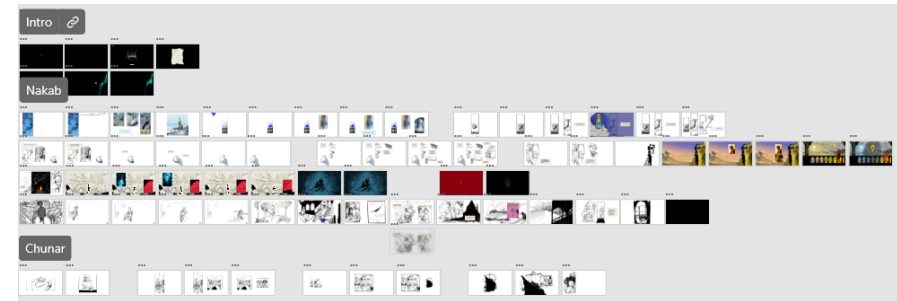
9.1 XD Prototype

This is the section where people will get familiar with the platform and the comic, and here we are trying to communicate a basic idea of how it works and what they can expect from the comic coming up. This will set a stage for the actual comic and make the



Old Saraikhana

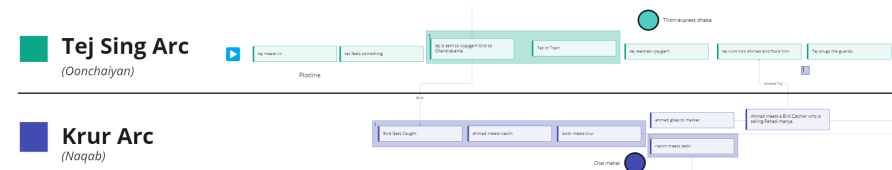
interactions familiar to find on the screen. This guided experience is almost completely dependent on Ghalib and the interactions made by Birendra.



XD scene division

Structure

We are following the user journey map to give the users a curated and well-planned experience that gives them enough space and support to understand the story on their own at their own pace. Then they will be able to explore the actual story. This is the part of the story that we have scoped down to for our P3.

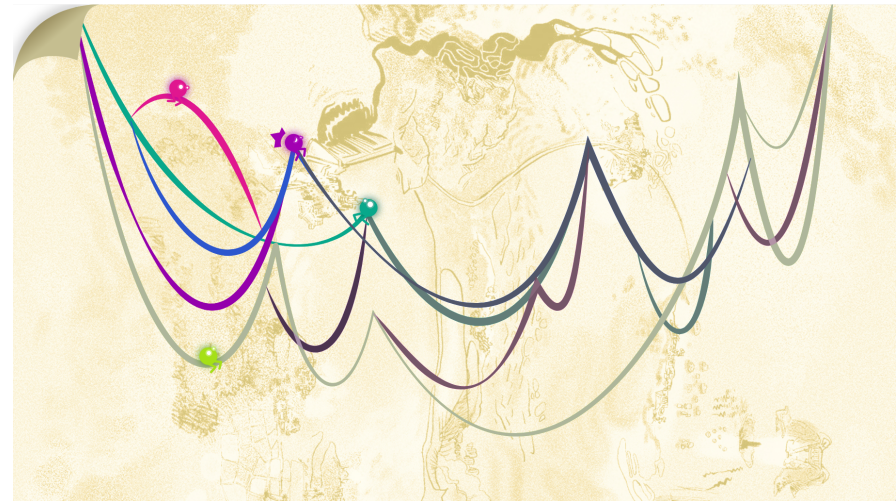




Chat interface

Platform

The saraikhana will be accessible from anywhere in the story but users have to sign up to use that. The platform will hold the story in the story progress section, other than that the detailed elements were discussed previously.



Map

Interactions

The interaction storyboard is done on top of the storyboard provided by Mainak. Interactions are designed at points before something crucial happens in the story which will make the readers think that they might have contributed to the initiation of the event in the story.

Here is the [prototype link](#).

9.2 With vanilla js

For development, we needed something that proves that this can be actually developed into a website. We started with something very basic, where we tried basic scroll interactions and triggers. This did not have any animations but it worked well in terms of what scroll-based experience we wanted it to be. So we moved on

and tried how we can play video on scroll, which was also very easy by triggering the current position to scroll position. But then we wanted to have the 2d on 3d style that will give a “depth” to the experience. We achieved that by using transparent videos, which “[worked](#)”, sort of. As we are completely using only vanilla javascript with some plugins the browser is not able to render multiple transparent videos at the same time. Further, we need to use some 3d libraries so that we have some WebGL engine that can take care of the rendering better.

9.3 Pixie JS

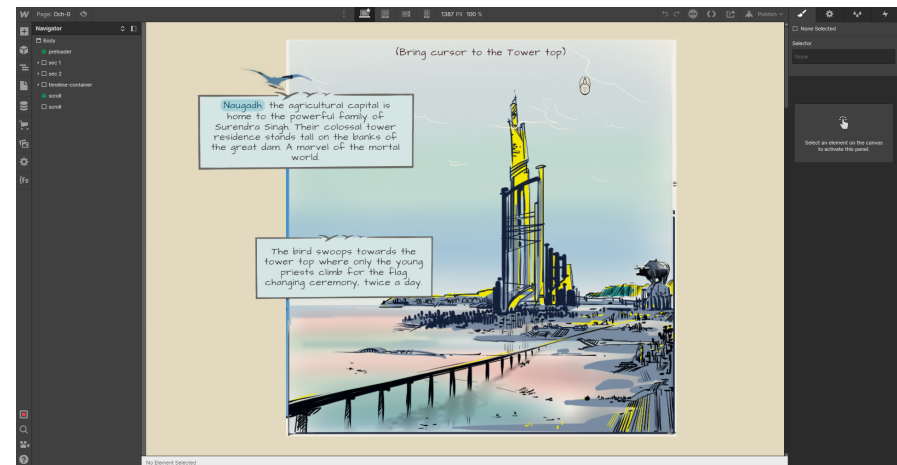
We started working with a full stack developer Soumya Jit. He helped us getting started in Pixie JS and build up the scenes on Pixie environment. Pixie.js does have all the capabilities to achieve the look and feel we are going for. But it was taking a lot of time to build up all the interaction from scratch because there are no premade interactions in our direction, specifically for webcomics in Pixie. So we went ahead and started exploring other no-code/ minimal code softwares.

9.4 Webflow

Working with only JS and Pixie.js did not work out as expected, setting up scenes where taking a lot of time than expected, hence we resorted to Webflow, a software as a service for website building and hosting. Here is the [final prototype link](#). Although it has a lot of limitations in terms of our ideation yet we were able to

put together the narrative in a presentable format, which could be used to test and improve the overall experience

We also did set up a few scenes in Adobe After Effects, we converted them to lotte files through an extension called *Bodymovin*. These lottie files (.json) uses still images and shapes and animates them on the browser itself and hence it is as smooth as it can get.



Webflow interface

9.5 DES

For a parallel project, we worked on a specific interaction intensely to make it more immersive, in which we explore how we can switch storylines at the interaction points. For this we tried out different stuff with a low-fidelity prototype and made a storyboard not actually looking at it as an interactive experience but how a multi-narrative story can be told.

Deliverable

The interaction of switching storylines is explored and tested out. We worked on the interaction of that point as a POV shifting mode and fixed on a perspective transition of the story depending on how you tilt your screen or move your mouse. The storyboard is attached hereby. The artworks are by Mainak. We made the prototype in Unity.



10 CURRENT PROTOTYPE

Among all the discussed ideas few executable and plausible ideas were then taken forward into a high-fidelity prototype. These are the final characteristics of our Interactive webcomic.



10.1 Platform

Onboarding: As part of the onboarding process readers are required to sign in or sign-up to the platform although they are not required to do the same for the intro and the first chapter.

Creating Profile: As we land on the first page we get the option to sign in or sign-up for the platform experience, this is an optional stage and even if a reader does not sign in / sign up they can still go forward with the intro narrative, and the first chapter of the experience, but at the intersection point in the narrative where the two paths diverge away we first introduce the platform, we call as 'Saraikhana', here the sign-in / sign up is mandatory to go forward in the story as this is also the first time the readers is introduced to the platform. Hence there are two scenarios a reader can experience from the landing page.

1st scenario [If the reader signs in from the landing page]: The reader signs in through the sign-in icon present at the top right corner of the landing page and they are directly taken to the 'Saraikhana'. In the saraikhana readers can either resume where they last left or they can go back to any previous chapter they want to visit from the map present in the top section of the saraikhana page.

2nd scenario[If the reader does not sign in from the landing page]: They directly click on the start button to initiate the intro sequence which is completely animated. After the intro is over, readers are able to read the first chapter and at the end of the chapter,

they are prompted for a mandatory sign-in which takes them to the 'Saraikhana'.

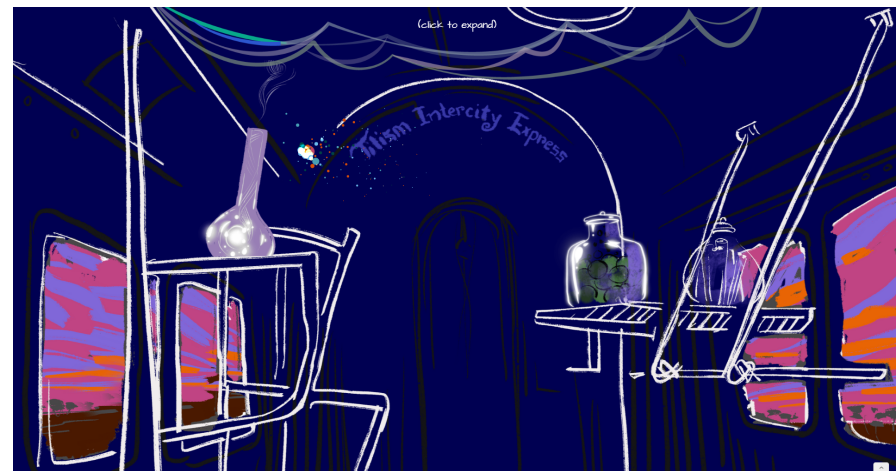


Introducing features

Introduction to the Platform: We have named this platform 'the saraikhana', a place where people can gather or come together to discuss. Please note that readers can access saraikhana only when the chapter ends or when the narrative branches into two pathways. Saraikhana is not always accessible during the narrative experience, the reason is aligned to the context with Dastan storytelling that saraikhana is accessible when the dastangoi takes a break while

narrating, in an actual performance of Dastan, the audience cannot or does not discuss among themselves while the dastangoi is narrating, once he finishes a chapter only then the audience can discuss among themselves or talk to the dastangoi.

Interaction and Micro Interaction in the platform: Only the basic interactions like Click and scroll are being used in the saraikhana, along with feedback while hovering over the features. As readers land on saraikhana's page, all the features are represented with a diegetic icon, while hovering over these icons readers can see a small description box with a piece of short information about the respective feature.



First-time appearances of features do not end with the introduction: Now let's proceed into the saraikhana, the very first-time readers land on the platform, and they can see a lot of different diegetic elements that can lead to different features of the platform. These features include Map, Community, Collectibles and Ghalib. The background of the platform changes depending on where the readers are in terms of the progress of the narrative. After login in for the first time, the readers will be prompted with a tutorial of information about each feature using a short descriptive text.



Storyline changing interaction

Changing storyline: As discussed earlier our narrative is a multicursal narrative which consists of multiple branches spreading out of a single storyline, so there are multiple points in the narrative where the branching occurs and readers are prompted with a choice to go in either one of the two choices.

Shown indication: every time readers are presented with the choice to select between two branches a map pops up on the top part of the screen, this map shows the possible branches that are available, and also it gives a rough idea to readers about the number of branches they already went through and how many are left to be read. The indication where the reader is currently on is marked with a mynah that represents the profile of the respective reader.

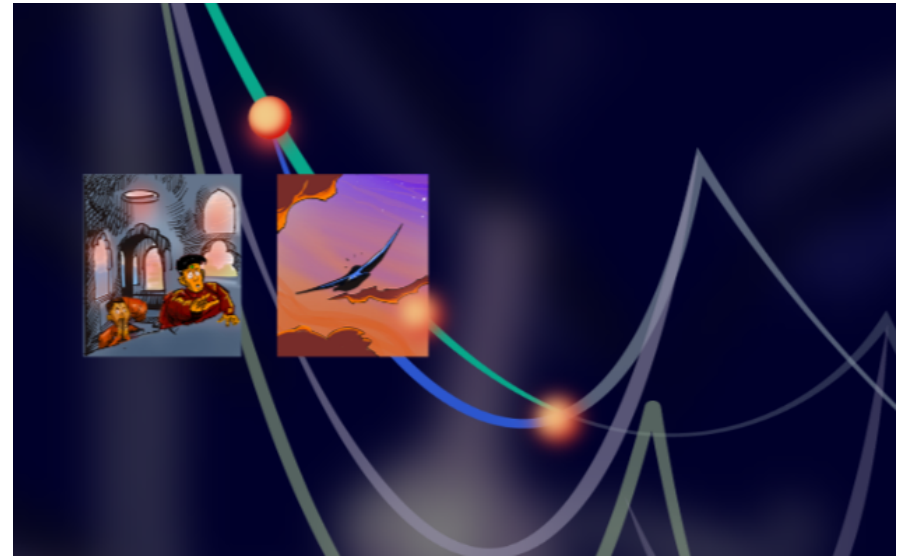
This Map is also accessible from the saraikhana, where a coloured line will indicate the progress of the reader and the greyed-out opaque lines will

Option to go back: The map indicates the progress of the narrative and also marks the chapters that are already being read, and hence there are two scenarios the readers can experience.

Scenario 1: if readers want they can go back to a particular chapter that they have already read. The readers have to hover over the section on the map they want to revisit which will show the icon over the specific chapter, clicking on the icon will take readers to the start of the respective chapter.

Scenario 2: if readers want to go back to the intersection point where two paths diverged, and choose the other path that they didn't choose the last time. In this case, they will again be asked to choose a path between the two paths although a small description box will pop on top of the frame of the path that was already taken.

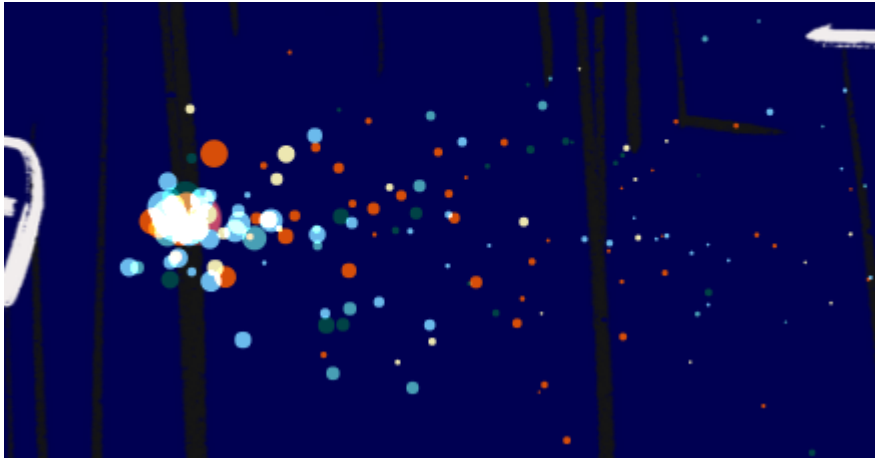
Change choice: In cases where the readers are opted to choose between two branches of the narrative and they chose path A, but instantly they realize they wanted to choose Path B instead, fortunately, they can certainly do that by just clicking on the back button on the top left corner of the screen, which in this instance will take the readers back to the point where they have to choose between the two paths.



Going back

Friend's reading progress: Once readers have logged in they are connected to the community and are also connected to their friends. Readers can visualize their own progress as well as the progress of their friends on the map present in the Saraikhana. The avatars of all the users are represented by mynahs, these mynahs are customisable and each reader will have their own unique avatar. These mynahs representing the reader's friends will sit on the progress map indicating their progress. This is not the end if you hover over the mynah of any respective friend you will be able to see a small text box

containing their name and a brief trailer of their journey which will consist of some specific scenes from the chapters.



Trail

Community: One of the main features of our Interactive Webcomic is the multi-reader community. It is a platform where readers from different strata can come together in a single place. This platform can open many possibilities among which we have tried to implement a few of them. The platform can act as a hub for comic readers where they can talk, discuss and share their love for comics and the platform can act as a primary source of the content as well as the opportunity to discuss the same content in the same place. Currently, Chandrakanta is the first narrative that the platform

supports but it can be home to many more similar narratives yet to come. We have all seen community games and channels on different platforms which were our primary motivation to create a common space for webcomics, graphic novels or other experimental narratives like Chandrakanta. As of now, we have incorporated a few features to initiate the engagement like polls, chat, collectables etc but to be honest it is just the tip of the iceberg compared to the potential it can have in the market and for the comic reading community.

Chakora: You are probably wondering what ‘chakora’ means, well it is a legendary mythical bird if searched can be found in Hindu mythology, and since our narrative is focused on Hindu fantasy we incorporated it into our platform as well. There are other legendary Hindu mythological characters and places all spread throughout the platform who will try their best to engage readers with the narrative and make the platform a fun experience.

Polls: Chakora birds will bring questions to the readers and will check if you are really hooked with the story, this will also allow the writers to understand if their narrative is engaging or it is not getting enough attention from the readers, on the basis of which they can improve their content. Hence you can get a gist

that these questions are based on the narrative, and the answers are hidden as options in the eyes of the chakora bird. One special feature about the chakora bird is that it has four eyes and thus the answer will be hidden in one of them. Selecting the correct options will give the readers points that they can use to buy collectables.

Stories: The narrator does not tell all stories while someone is going through the main storylines. Few stories you just get to know from the “li’l birdies”.
Some Khaas Chakora birds

Trails: The presence of other readers are shown by trails left by orb following other’s mouses. Depending on what character they have in the game it will have different characteristics. By clicking on other orbs you can see their profile and chat with them.

Collectables: Collectables are another way of engagement within the platform, there is a range of rare items marked as collectables that the readers have already seen or interacted with in the realm of Chandrakanta narrative. We have multiple collections of collectables that are to be obtained by the readers and can flaunt to the other readers. These can also

be attached to the avatars of the respective readers which can contribute to the unique appearance of their avatars.

Logic: Collectables will be unlocked as the story progresses and can be obtained by using the collectable points achieved from the polls or buying them in exchange for real-world currency or cryptocurrency.

Rarity: There are currently three different types of collectables that a person can obtain within the platform. Common, Uncommon and Exquisite. The common collectables will represent the daily objects and are easy to get and come at a really low cost but are still worth the purchase since they will still be unique. The second category The uncommon are objects which have a higher level of complexity and are usually run with steam-based mechanics. In the third and final category, the exquisite objects are extremely rare and hard to get as they are more expensive and associated with tilism magic which is scarce in terms of the narrative.

Exchange: Readers can also exchange their collectables with their friends but they can only exchange similar rare items, for example, common collectables can only be exchanged for another common collectable and likewise exquisite collectables can be exchanged with another exquisite item.

Exchange is possible only between friends so it encourages making more friends. Exchanging collectables also has another perk, both the parties receive a small number of coins that they can use in the future to buy more collectables. This amount is calculated as 5 per cent of the actual cost of the collectible, hence the rarity, the more amount they get after exchanging.

Create: Now it's time to get creative, readers can also design and create their own items that others can buy. They can create this in a design space available in the platform itself. These items can be put up for sale under the three rarity categories, but only one can be put for sale from one account every month. No need to say the creator will receive 50 per cent of the actual cost of the items and the other 50 per cent goes to the platform as part of the exhibition charge.

Modular Storytelling: If you look at the map you will clearly see that the narrative has multiple branches, the narrative is divided into multiple parts to form the multicursal format, it was only possible due to the nonlinear nature of the narrative. So each one of these parts that are being divided, shapes the modular nature.

Curated frames: Every modular section has its own curated frames. By curated frames we mean a sort of trailer where a few interesting, important and relevant frames of the particular module are brought together to create this trailer. What is the use of these trailers? So when a reader is looking at his friend's progress or when he is looking at the two options at any intersection point, they are being presented with these curated frames/trailers.

The first scenario is just a glimpse of the progress of the friend and gets a gist of the experience their friends went through. Any new frames will create a sense of anticipation and will encourage them to go through the storyline that they missed while their friends already read.

The second scenario is when the reader is opted to choose between two paths, as they hover over the two frames and keep it there for 1 sec, the curated trailer will play on top of the frame giving a gist of what they are about to read.

Voice overlay: Voice acting is an important part of this project along with background music and foley sounds. All the modules have their own unique flair of background music

depending on the scenario within the narrative. As Dastan is an oral form of storytelling, the narrator/ Ghalib in our platform will have a presence through his voice. Wherever Ghalib is seen in the narrative we will hear a modulated voice either narrating the story or giving a short description to connect two modules or giving information about certain characters or elements of tilism.

Story short description: Ghalib will also curate a short description of the upcoming module when the reader is given the option to choose between two paths/modules. As we already know a curated trailer will play while choosing, along with the curated trailer we will also hear Ghalib's voice narrating a short description.

12 TESTING/EVALUATION

Qualities of Great Comics^[11]:

1. Consistent Narrative: Narrative is the backbone of great literature. For the narrative to be clear in a comic, the reader must be able to understand what is going on in the story at all times. Consistent narrative helps the reader to feel comfortable with how the story unfolds. This includes

characters who are instantly recognizable, repetitive speech patterns, or even repetitive panel layouts.

2. Command Of Pacing: Pacing is the rate at which the reader takes in the story. It is determined by factors such as visual layout, density and nature of lettering, and emotional resonance. More than merely setting a rhythm and sticking to it, pace requires variety to make the story interesting.

3. Evolving Style: As an author working with an artist for the first time, we understand that we cannot tell a story in the same way as we would with a different artist. It will almost never be possible. We periodically ask ourselves and those around us "does the style of the drawings match the story?" Any potential readers would be confused because there was no consistent form or tone.

4. Elicits Passion: This one is a little esoteric but is easy enough to understand: does the writing of a comic lead the reader to believe that the author was invested in what they were making? We have read some terrible-looking comics where it showed that the artist clearly cared. We have also read beautiful comics that seemed lifeless and lacked excitement.

5. Good Presentation: Often even if the story. It was recommended to find a book that we like as a reference. We research how that book was physically put together. The presentation can also extend to web design, as webcomics may not have a physical component to them. The goal is to plan ahead so that something as easily overlooked as presentation doesn't distract from the quality of your work.

Our study will involve checking the above qualities to determine if the comic is great, although even if it lacks quality like presentation it can be compensated through the quality of the story. The questionnaires will involve the qualities that will help us understand where we lack in terms of delivering an experience.

A Social Experimentation:

Chandrakanta was conceptualized initially as an attempt of making something original to India.

Future scopes:

- I. We are still depending on a lot of technical challenges that should be resolved if we get professional support on board.
- II. We see a need for thorough research collaboration to
 - a. Observe people's reaction to stories. Further tests whether communication through image

and text is balanced with experiments of music; still, the way people perceive information from this kind of medium can be an independent research altogether.

- b. Design the structure of storytelling through this particular medium. It is vast and full of possibilities, and need thorough study & proper curriculums to design the workflow.
- c. Synthesize a detailed report of viewing experience, monitored from a crowd that regularly reads comics, and with ones that don't read comics at all.

III. A functional space for readers is yet to be developed. All the previously mentioned points are going to help us build that.

13 CONCLUSION

Chandrakanta as a project has been a contract of passion, an ambitious endeavour. Therefore the stake of a catastrophe was always looming low. At the end of six months as an independent project, it has been proven helpful to understand how a collaboration works, design various solutions and making decisions that complement the core concept. The project as any other one has seen some ups and some lows. It is fair to say we have achieved a partial assessment of what we had envisioned initially. Although a lot is still in a walk-through stage, the interaction works well according to the test results. The pilot testers could comprehend the story as well as were able to identify the experimental features of this medium. On the other hand, the lengthy story-line, limitations in terms of technical support and some crucial debates stalled the process few times. But constructive criticism always has course-corrected us. Working in an interdisciplinary setting, moments of realisation and reflection were abundant. This project shall, in this fashion, be important to shape the future scopes, both as a better product; as well as us being more informed individuals who got some experience in the domain of media, design and psyche.

14 LIMITATIONS

Looking at the whole size of the story any amount of time will be insufficient, we were ambitious to take up this project and even more when we conceptualized and designed similar amount of interactions to complement it. While going through the production we understood how time was a limiting factor. We tried multiple ways to develop a fully functioning platform but we were obturated from building it from scratch, thus we resorted to a form of prototype which doesnot have the backend to support the community system. We have also kept some of the narrative balck and white due to the huge amount of artwork in scope and comparatively less time to produce complete colorful frames. We also wanted to bring in voiceover artist along with sound, but due to unavailability of artists and resources we kept it on hold for future scope.

15 FUTURE SCOPE

Although the project incorporates multiple high level interactions as well as microinteractions in an immersive animated world, it would have been incredibly groundbreaking if the platform were like a place where the users could meet other characters and interact with each other. Thinking out loud, it can be thought of as a train that literally transports the user from one storyline to another. Some of this can be experienced in the Tilism world, where one can see lots of birds which are like readers as well, where the user gets the bird's eye view of the story. Apart from immersion, when it comes to collaboration, the experience with other readers could be more diegetic and well supported by the story.

All the ideas discussed here might not be incorporated into the final prototype right now, but nothing is going into the dustbin. We are keeping all the pending ideas for the future scope and are going to take this project forward, with the help of more man power we will overcome the technical limitations and complete the whole narrative experience. Next in line to implement are

1. Minimising Text box
2. Ghalib as a guidance system
3. Reward system and customised collectables
4. Interaction between readers
5. Music and Voiceover

16 REFLECTION

Working in collaboration really made this project a lot more productive, diverse and equally enjoyable throughout. The work generally was to put all the interactions and graphics on a platform while making it simple to navigate. I tried to move away from a typical GUI-based structure to a somewhat more comic-style experience. Which came out quite well and combining with the narrative itself it gets even more exciting.

In the conception of the project, we kind of had high hope of completing a really whole book with 8 chapters and building upon it later after P3. But after a lot of iterations, the final prototype is less than one-eighth of the initial stage but the direction is way clearer and working well. There were a lot of other helping hands as well who helped along the way.