

GamAve: The Gamers' Prime Avenue

FIGMA

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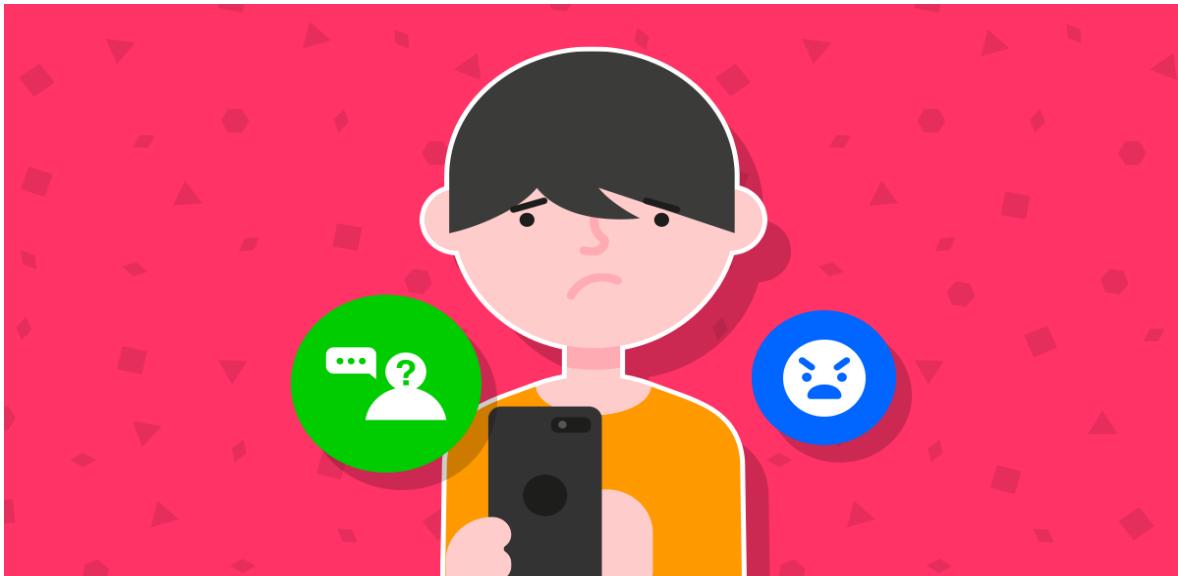
ABSTRACT

Being in an era of fast evolving gaming platforms, finding a suitable community to game with is not just difficult but daunting. The interaction is low and there are trolls. Also, multiplayer games' internal search engines are not the best at finding great game buddies. Given the large number of gamers and a lack of moderated game community building platforms, it is difficult to find a suitable gaming partner. The inspiration behind this project came from the experiences of Aditya Bugalya(himself a twitch streamer).

Our main challenge was to be able to conceive a platform that could act as a moderated gaming community, thereby reducing time required to find game mates and also limit the chances of flaming and griefing(all gaming terminologies).



As a solution to this, GameAve is an application(prototyped for mobile phones), which helps build a community of gamers. Among its features are, a player search engine(based on user preferences), performance and friendliness metrics. It is a multi-game application, i.e. it is one app for all games. It acts as a gaming level socializing app.



INTRODUCTION

Our story began about a month back, as we sat down to decide on our group project's problem space. There were a few good ideas, but none that seemed very relevant, given the pandemic situation. This pandemic has indeed changed our world, and that too radically. The lockdowns, the social distancing and the scores of other restrictions have indeed brought interactions to a standstill..

Each one of us has been holed up in our homes for over a year. After all, we needed something to do. Apart from studying, surfing the net and an occasional chat with friends, we had little engagement in games. Unlike sports, when it comes to online games we are hardly able to coordinate with our friends and play. Especially given the separation due to the pandemic, deciding on the game to be played is itself a big task.

Flip Flop

Most of us like to do our gaming during random breaks. Being able to coordinate mere timings is seldom easy. Let us take a common scenario. Let us suppose you got done with your mid semester exams and called up your friend, to invite him for a session of CS:GO. Now what do you generally expect would happen? Most of the time our dear friends themselves have some assignment or engagement that keeps them busy during that period. Now, above all this we have our erratic corona life schedules. It is indeed difficult to coordinate when we are not in a common physical space.



Now, added to this, is the complication of interest and skill levels. Uptill last year, there was one religion in the gaming world- PUBG(you guessed it). After its banning, I have found it difficult to find common games that me and my friends could play. Generally, the games I generally like to play(strategy based games) do not match his(based on action and reflexes). If I would call him for DOTA, my friend would call me for Halo(pure action!). And even if we found common games, I would struggle to cope with his level and this would lead to a streak of demoralizing defeats.



All in all, we find that coordinating with a limited number of friends is difficult. So, why not build a platform to bring people with common interests together? Surely, we can find a group of 15 people in the world, whose timings, game preferences and skill levels match.

Platforms

Now, finding people based on random pairings and making friends during games is super difficult. To build a community you need better interaction and for that, we need a platform, gametime is not enough. Now, amongst the common platforms used today are Reddit and discord. Do these manage to pair players and help save their time?

Time and Safety

If we are to find a partner on reddit, you have to first find a subreddit. Even then, you will only find content. There is no guarantee of finding a partner and besides, anonymous communities are not the best places to make friends. This is especially valid for children and young teens(ages 10-16), which is a major part of our target audience.

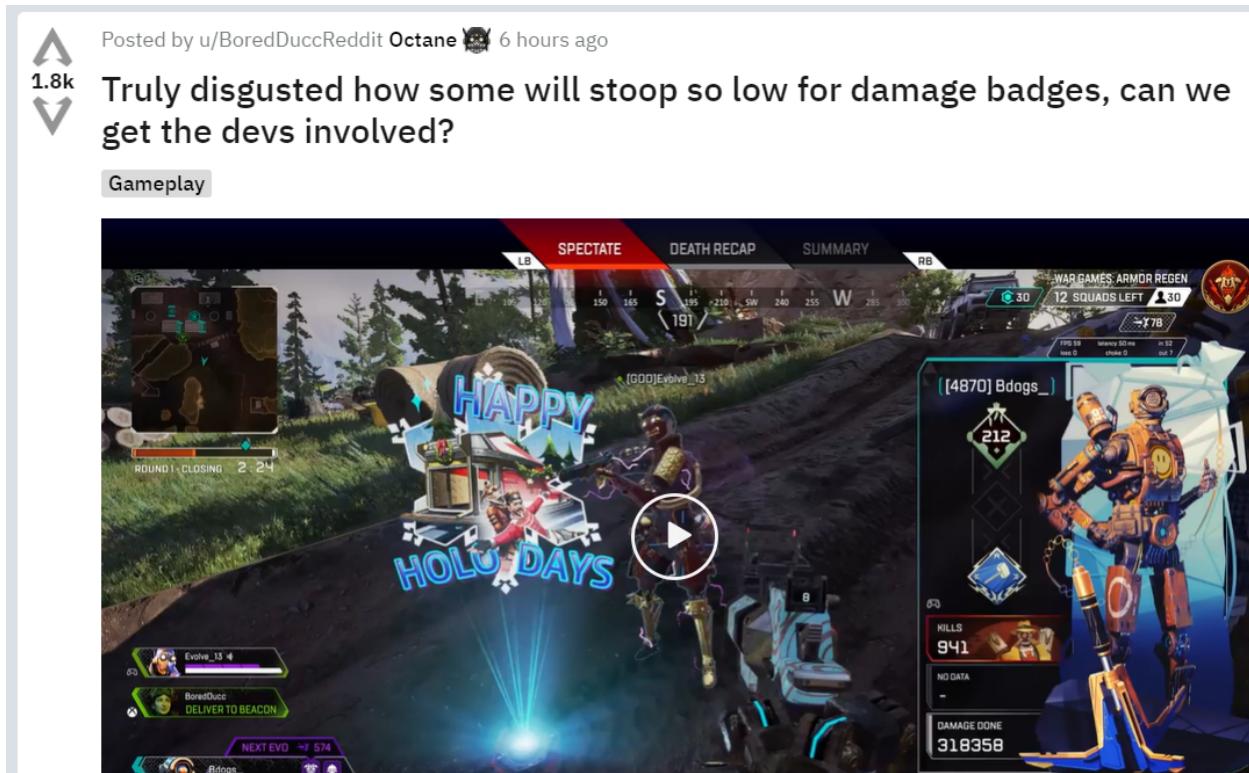
Discord is another commonly used platform. However, it has no efficient means to search for gaming partners. You have little means to understand whether the other person is committed to playing in groups and above all we also do not have griefing checks.

From all this, our team came to the conclusion that we need to work on an application that helps match players and create healthy gaming communities.

Target User

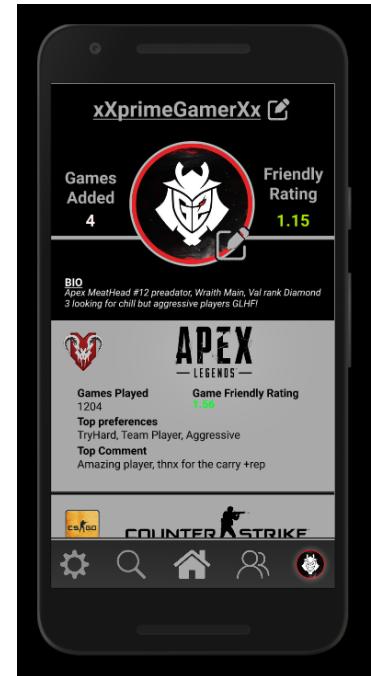
According to data on Player ages on Statista, 60% of the gamers are below the age of 34. Also, the intensity and interest of the user is at the peak in the age-range. Also, females make up more than 40% of the gamers in the developed countries(Wikipedia). Therefore, as far as age demographics goes, we aim to create a solution for the up to 34 age group. Also, females make a significant share of the total users and therefore, they cannot be ignored. The app will cater to both genders.

If we look at the list of most popular games, they are mostly Action games(like PUBG,Call of Duty), followed by strategy(like DOTA,live Chess and Clash of Clans) and further followed by sports games(like FIFA). We will initially focus on action games(most popular and forte for target age group), then expand base to include strategy and sports(simulation) games. This will be reflected by the choice and design of the user interface. We will also focus on the issues faced by this genre of gamers.



This is not an unusual complaint, when it comes to playing online. It is instances such as these, when our opponents and partners resort to unfair practices, that our interest in gaming dampens.

Here, the opponents and the team-mates teamed up against one person to up their damage badges. I have had games where my partners kill me, just for fun. Let alone random behaviour and abandoning of serious games. In the gaming world, this is not just about accidental friendly fire, rather, it is a common happening that destroys all the fun. Games have inadequate counter measures for these kinds of practices(overly lenient buffer period policies and lack of accurate feedback systems).



GamAve into the Game

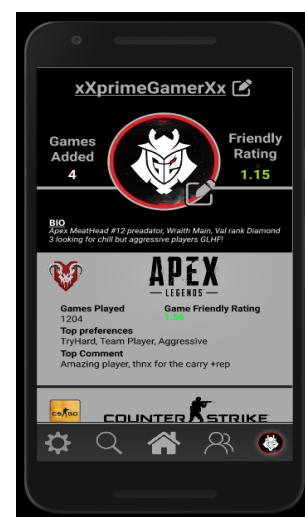


GameAve brings with it a player search option bar. The user can enter his/her requirements and preferences. The app itself helps in the process of matching like minded gamers(or a diverse set of them based on the users' preferences). It takes into account

important factors such as player stats and friendliness ratings. It acts like a one stop platform for multiple games.

The user can simply open the app, search for live friends, send requests and start playing. Many games have friend options. However, they are not convenient(manual searches required and no friend matching facilities).

Also, the level of social interaction is not enough in them. Our app is designed to help people form communities and play with one another on a regular basis.



METHODOLOGY:

Problem Definition and Identifying Target Users:

Target User Base and Stakeholders:

- People between the age of 13-35
- All genders
- People interested in forming new communities and learning new games.
- Exploring Gaming career options.
- Sports Regulars
- People who want to share their gaming skills.

As you are aware, playing games is one of the best stress busters and is also good for people who suffer from depression(within a limit of course). While playing online, you go through all kinds of feelings. Especially playing with friends makes games much more enjoyable. However, the problem is that in this fast paced and low patience age, everybody is busy with their work and other engagements, that many people are not able to make friends. Even when they are free many of them are extremely introvert because of their inability to find suitable friends. In our opinion this should be possible at least online.

Many people who play online games have relatives, friends etc to play games with, however, one of the biggest problems they face is their not being able to match skill levels. This makes games less competitive because of which they get bored and sometimes even leave their games without completing them. Another major problem is the high level of toxicity among the players. Even if someone is lucky enough to find someone to play with, there are other issues, such as players abusing one another throughout games. This makes players uncomfortable and also reduces the enjoyability of the game. Usually, these kinds of players who abuse, pass bad comments and take

the game at a personal level in between the games which spoil the games and make another player leave the game and are also repeat offenders.

As per an investigation of game toxicity by the Anti-Defamation League, more than 80% of multiplayer gamers have encountered some form of toxicity, most of it being related to gender, race/ethnicity, sexual orientation, religion or ability. One of the biggest problems that every player definitely faced at some point in their life while playing online games is that they regularly are matched with those people, who are usually not as interested in playing that game. There is no application that can show recently played or at which level they are at.

Gaming the User



Persona 1

Arjun

Age:19

Student

Level(Gaming):Expert

Level(Sports):Below average

Arjun studies at the IIItd. He is very good at playing video games and has in fact played almost every famed game. He regularly wins cash prizes in many of the gaming contests. However, at the same time when he sees his classmates playing badminton, he too feels the urge to play with them but due to lack of knowledge and a lack of players who can play at his level or can guide him in playing badminton, he feels demotivated he does not go outside.

Motivations: Seeks expertise in the games he plays. Also yearns for social interaction.

Frustrations: Can't find persons with a matching skill level or a willingness to teach.

Persona 2

Aditi



Age:19

Student

Level(Gaming):Novice

Level(Sports):Expert

Aditi studies in Delhi technological university. She is very good at playing badminton. In fact, she represented her school at a national level and has won many competitions. However, due to the lockdown she is unable to play badminton and looking at others playing online, she now wants to shift her focus to online gaming. She can't find players who are willing to coach her up.

Motivations: Wants a mode of entertainment. Also loves new challenges

Frustrations: Can't find ways of starting out. Not able to find the right people who can help her improve in this space.

Insight:

Looking at the above scenario, we realised that it is not easy to cater to the needs of Persona-1. The app may not be able to guarantee the safety of a user when he/she goes out to play an outdoor sport with a group. Absolute safety of an\ user is too big a claim to make and besides, the information collection mechanism for such levels of safety may deeply infringe the user's privacy.



Persona 3

Karan

Age:14



School Student

Level: Frequent

Karan plays video games for 2-3 hours on a daily basis. However due to various issues such as toxicity among his friends, he wants to leave their

community. He is unable to find a community that is more inclusive and shares his interests. Also, the level of interaction is rather low between randomly matched players.

Motivations: Gaming is his favourite time pass. He sticks to the 2-3 games that he loves and gets rather excited about winning a game or series. He also wants to make friends online and get challenged on a regular basis.

Frustrations: His current friends are toxic. He also cannot find any other friendly group that matches his skill level or interests. He gets bored playing single player games as he doesn't want to play with his current friends.



Persona 4

Harshita

Age:24

Recently started working

Level: Proficient

Harshita had a lot of friends playing video games. However, after her shifting cities, she very soon realised that she was no more in sync with her old friends. She is great at playing video games and is willing to even teach. She prefers someone who shares professions, so that they can discuss their work frustrations as well(after a long day at work).

Motivations: Loves video games and uses them as a refreshing hobby. Also, is serious about the work she does.

Frustrations: She isn't able to find like minded gamers, who value their time. Also, she doesn't fit into most gaming communities because of her work first mentality.

Requirements Gathering:

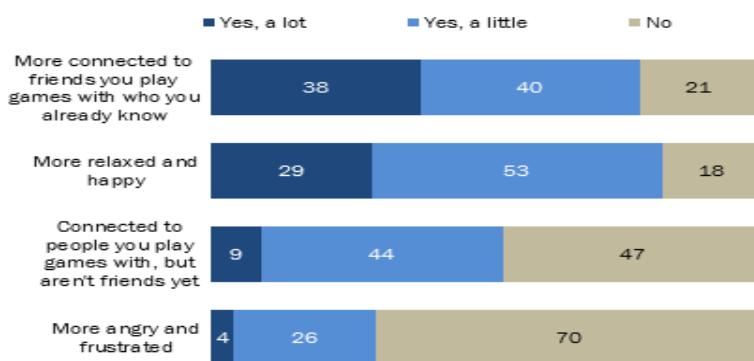
“The history of the games industry is, ironically, not about the industry in a lot of ways – it is about community. It was the culture that grew up around arcades in the early 80s that cemented the sense of electronic gaming as a pastime. The first mass-produced game, Pong, was a two-player experience that found its home in fast food joints, and when Pac-Man, Donkey Kong, and Defender arrived later, there was an engaged group ready to embrace them. Arcade competitions, meet-ups, and tournaments flourished across the US and Japan, mostly at the fan level. Arguably there would be no industry without these early adopters, without the brotherhood of the dingy coin-op palace.”(Reference- History and evolution of Gaming-Riad Chikhani on TechCrunch).



Observations:

Online Gaming Builds Stronger Connections Between Friends

% of teens who play online with others and feel...

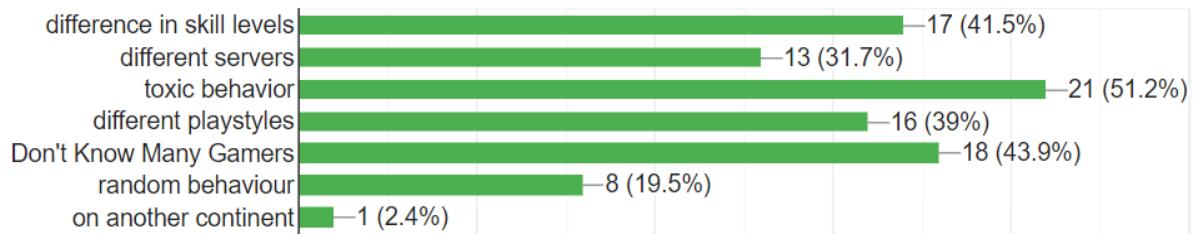


Source: Pew Research Center's Teens Relationships Survey, Sept. 25-Oct. 9, 2014, and Feb. 10-March 16, 2015. (n=567 teens who play games with people online).

PEW RESEARCH CENTER

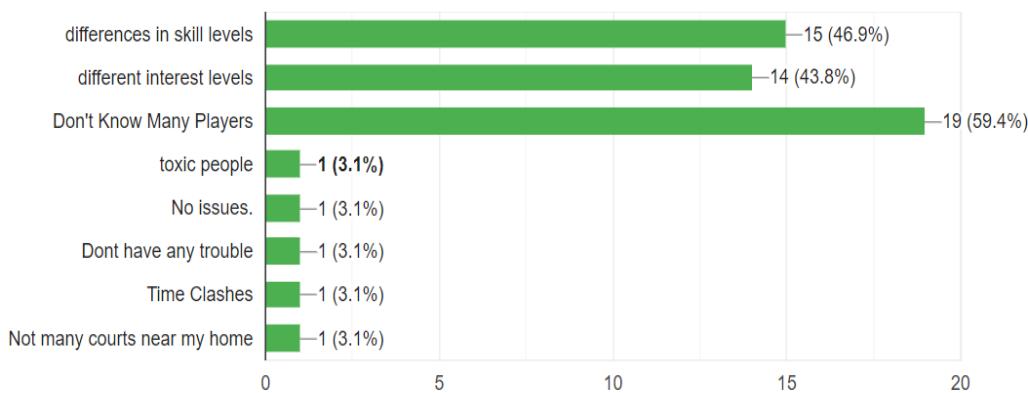
(ref -pew research center report)

1. The biggest problem faced by gamers was the toxic behavior of players.
2. Players could also not find other players and also struggled to match playstyles.
3. 78% either wanted to learn or teach(or both).



4. 87.5% of people could not find Sports partners.

5. The biggest problem in outdoor sport were-

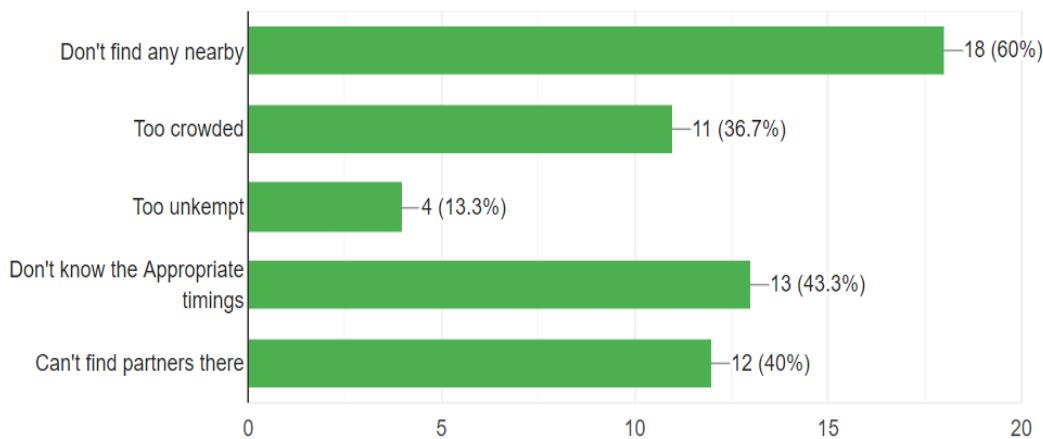


Google response sheet stats.

6. Difference in skill and interest levels was also an issue.

7. 81.5% people face issues while looking for a venue for outdoor sports

8. The main issues with venues



Google response stats.

9. Most respondents were between the age 14 and 20

On the basis of our study-

Criteria for matchmaking-

1. Region and Language(could also want to play with foreigners)
2. Availability of Mics
3. Game Choices
4. Skill Level
5. Playstyle(team player/aggressive/ defensive)

The criteria will change with games.

3. Google Form Link(of initial survey)-54 responses:

https://docs.google.com/forms/d/e/1FAIpQLScoYVBHbujR_CGawCQssDKw4YQNgR7bKe2gaOx-wz5z1Uxi3A/viewform?usp=sf_link

FINDINGS FROM DATA GATHERING(link to the first survey->above)

After reading reports from data gathering a number of important facts are discovered about gaming issues people face, with the unknown gamers with whom they play.

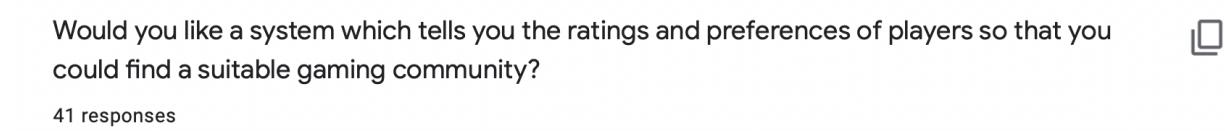
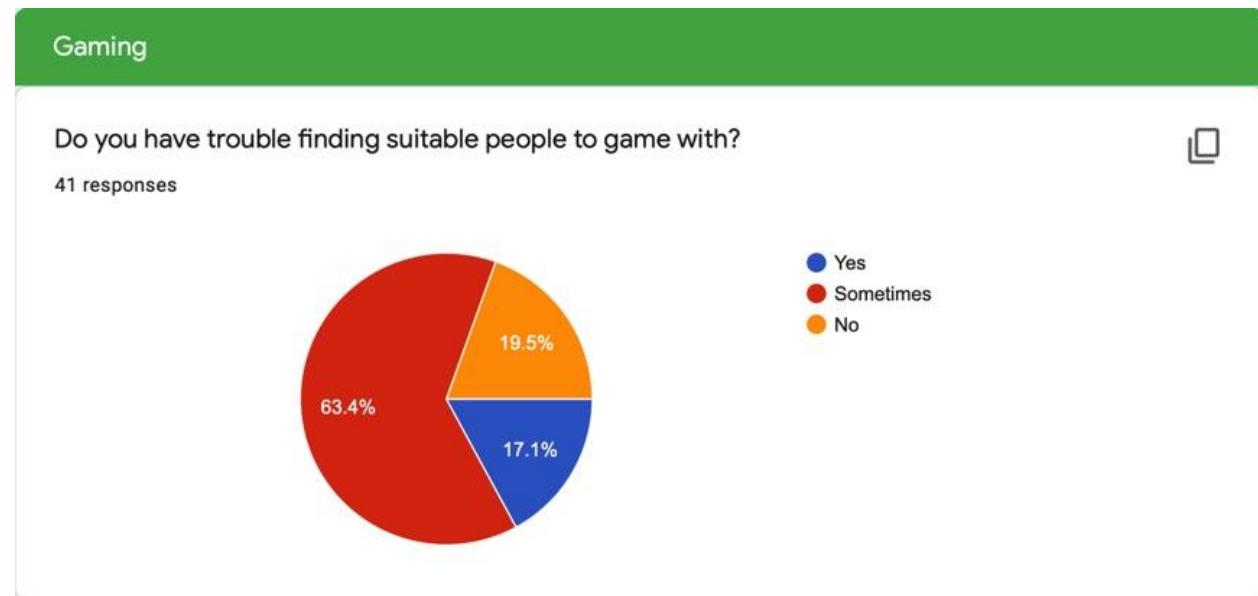
Some of the major Questions in our minds before the study,

- 1.What gaming is about?
- 2.Do people have trouble while finding a suitable person who matches their preference?
- 3.Do people want to learn and teach gaming?
- 4.What troubles the gamer community the most?

When we interact with gaming communities we come across a diverse set of preferences and opinions. However, most people game because in addition to being fun, playing video games can reduce stress, lighten depression, increase vision, improve the ability to multi-task and improve decision-making skills(within a reasonable limit).

Analysis:

One of the major concerns is not finding the suitable member for playing with users and the algorithm set by gaming apps to randomly choose a person from a different zone but what if they don't want to play with them as a team or they want to compete with different zone places. As our study shows-



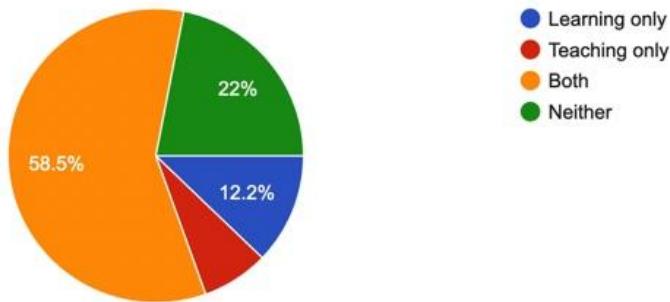
So to solve this problem we created a preference tab option in our application which enables you to match with your type of people(or from diverse backgrounds based on your preferences).

The first question that comes to a user when he/she plays a game is how one will be able to compete and become really good at it, in a short time. As we know success has no shortcuts so providing gaming tutorials to people is also one of the most effective ways of increasing the popularity of online gaming.

Would you be interested in learning games from others and in teaching games to new people?



41 responses



Our study shows that people also want to learn new techniques of playing a game and also want to share their skills with other professionals.

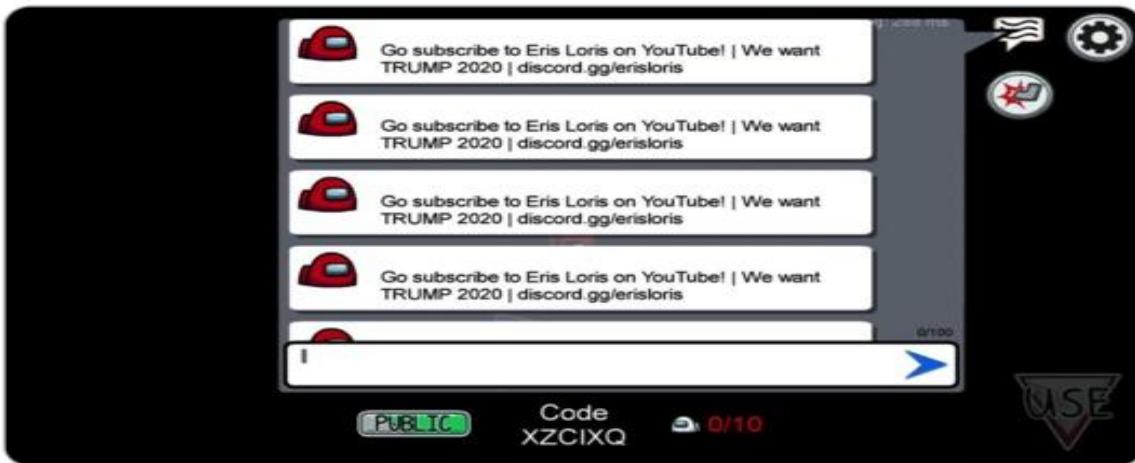
So now, the important question is what are the issues that trouble the users most? We can clearly see that griefing (basically spamming and abusing in gaming terminology). During a game, a SPAMMER is a gamer who acts to the detriment of the gaming experience of other players, by sending the same (or very similar messages) repeatedly, or by keeping their finger on the trigger button and achieving kills by the spraying of bullets, rather than through skill(that too through friendly fire and unfair agreements with opponents).



Sonic The Hedgehog Gamer
@SonicTh09529692



I have found the Hacker His name is Eris Loris. He is a skilled hacker. Do not Join his dicord 😠 #erisloris



7:12 PM · Oct 26, 2020

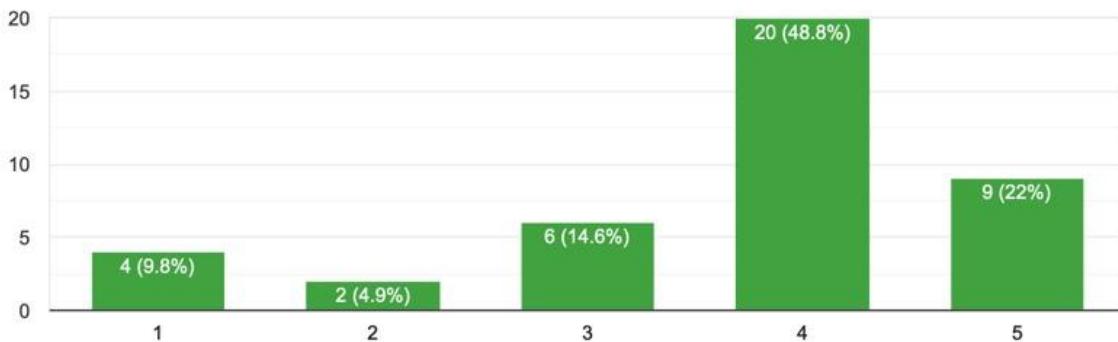


41 responses

Do you believe toxic behavior and griefing are major issues faced while playing with random players?



41 responses



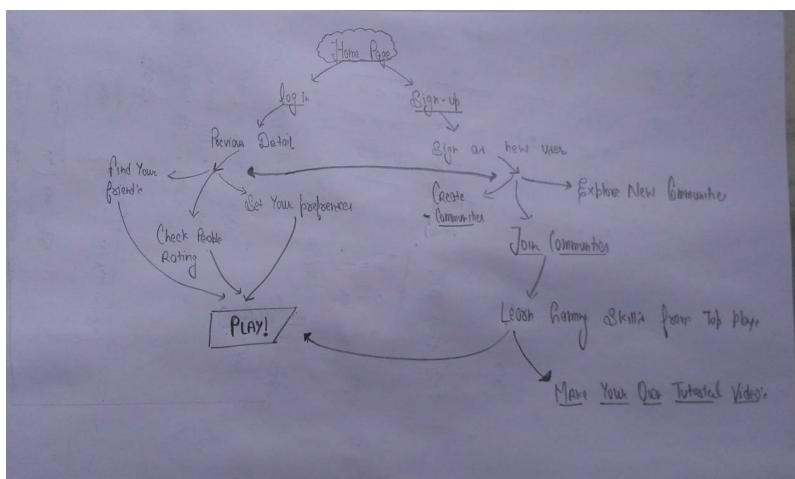
Ideation, Low-fi and Hi-fi Prototypes:

When we struck through the standstill thinking about what to do about the project. We were looking for ways to find problems and the way I chose was to think about things that affect me,

and so came to my mind that something which I suffer from every day when I wanna enjoy my time and take it easy after hard work of a day, random teammates in games. Now not every random teammate is a problem, some are very nice and it's amazing to play with them, but seldom you find someone who you "sync" with. The increasing competitiveness of games has not only made people more talented, but there is also an increasing number of people who would like to put the blame on others, trolls or int-ers as known generally. These guys are unnervingly toxic, and really abusive as soon as things don't go their way, and with this in mind, we decided to make an app to cope up with this.

The base of the problem was there was no active way of any ingame system to differentiate between toxic people and friendly people. CS:GO, for example, has a reporting system that is comparatively more effective than other games, but even then the game is hated for its toxic community in some regions, on other hand, League of Legends, one of the most popular eSports to exist, still has issues handling these reports and hence rarely does anything when someone gets reported for abuse. We decided the easiest way would be to go for a rating system, just a simple system that is directly affected by people's reports. This would help people who play with a person to simply go to their profile and report. Though it sounds really simple and easy to execute, we stumbled across a big obstacle that possibly could've stopped us from working on this project, the fact that people can spam report people or "bot" them, which is

exactly what it sounds like,
using a bot to spam report
someone non-stop.

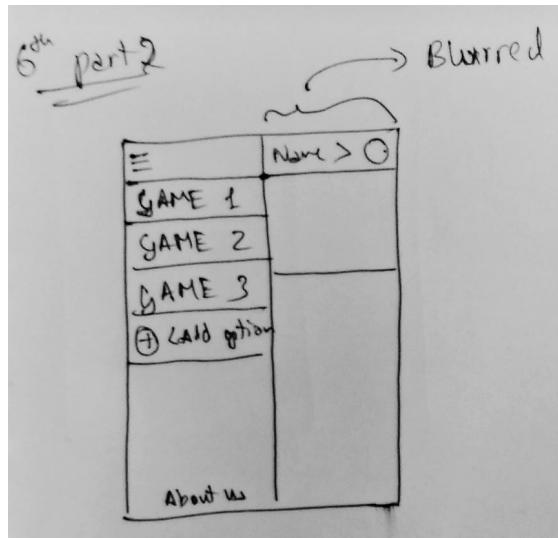


To solve this problem we decided on a buffer system. What this system does is basically make sure that a person can only report the other person

once in a specified time period. As for the botting situation, we made it so that you need to have

the app for a while before you can report someone. Once we crossed through this we decided to take it up a notch and think can we make it so that people can match with players based on their preferences too? Since everyone liked the idea we decided that adding preferences was a good idea. Since we now had the option of both preferences and rating matching we decided to start working on a more detailed lofi prototype.

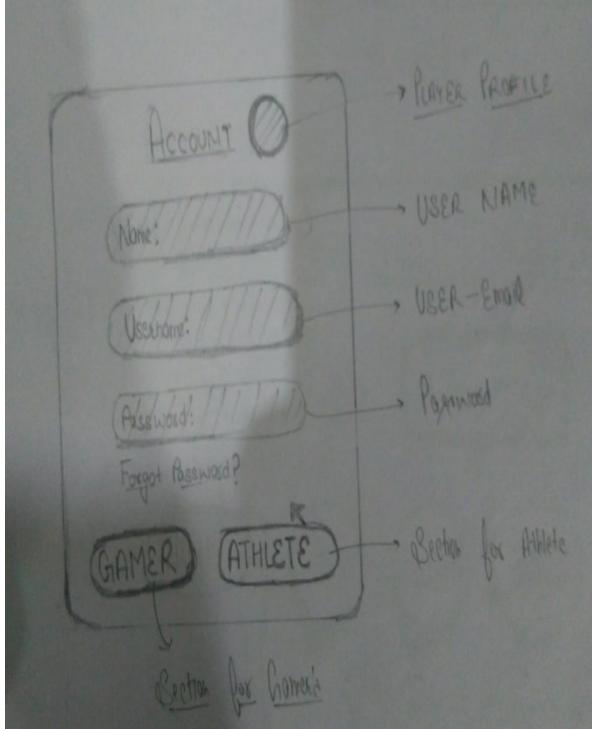
We all contributed with ideas which we drew out on paper and decided on the best sections out of those. It was a little difficult to agree on each other's ideas cause ofc, everyone liked their own but we managed to figure out common ground and finally decided what all we were going to do and started working on a final design. Some things made it till the end others didn't because we were constrained by our knowledge of how to use Figma to its best. Like the blurring of the background here which we thought would look great ended up getting rid of.

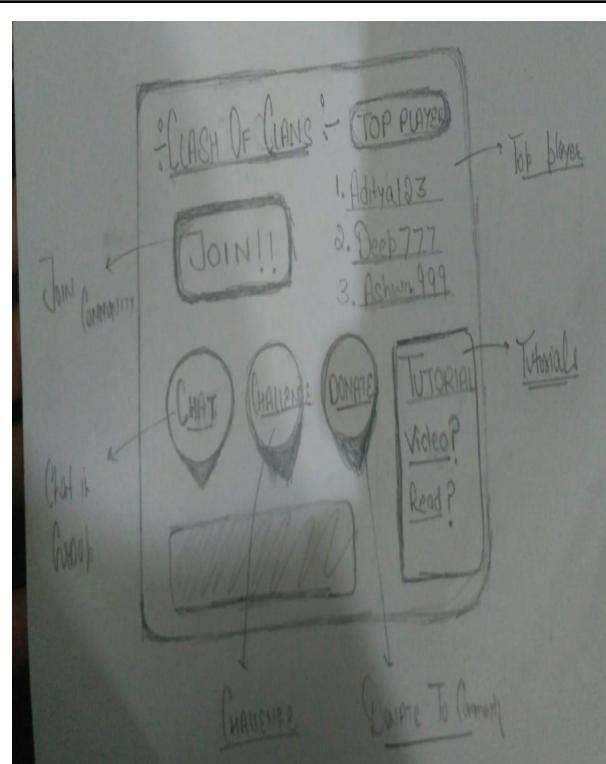
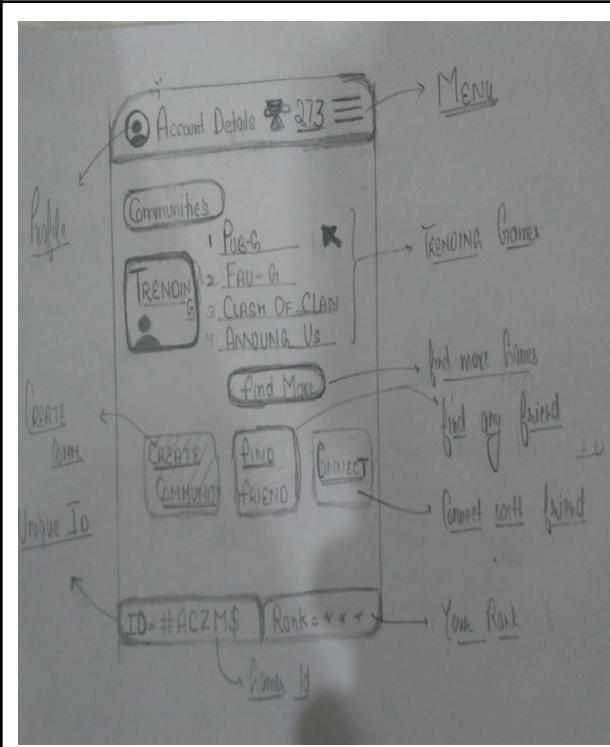


Once we settled down to finally work on the hi-fi prototype, we faced a lot of problems, because Figma wasn't as flexible as we thought it would be. A big problem was managing fixed elements with scrolling ones. Since we were using smart animate, for some reason it thought the background was the same, and when we would switch tabs using the bottom hot-bar from a scrolled frame to a fixed one the latter would glitch out before resetting and was very annoying. The solution was easy but tedious, we had to make everything on the fixed frames as "fixed" explicitly.

A few major changes made in the hi fi prototype were the positioning of most of the major elements, adding a bottom hotbar, the search screen, the friends screen and settings as an overlay, and other such changes. We decided that in the end, these were better suited to the app and the theme we were going to. The dark theme was decided to make it easier on the eye and the contrasting colours could come out better indicating the changes such as when the match was found, etc.

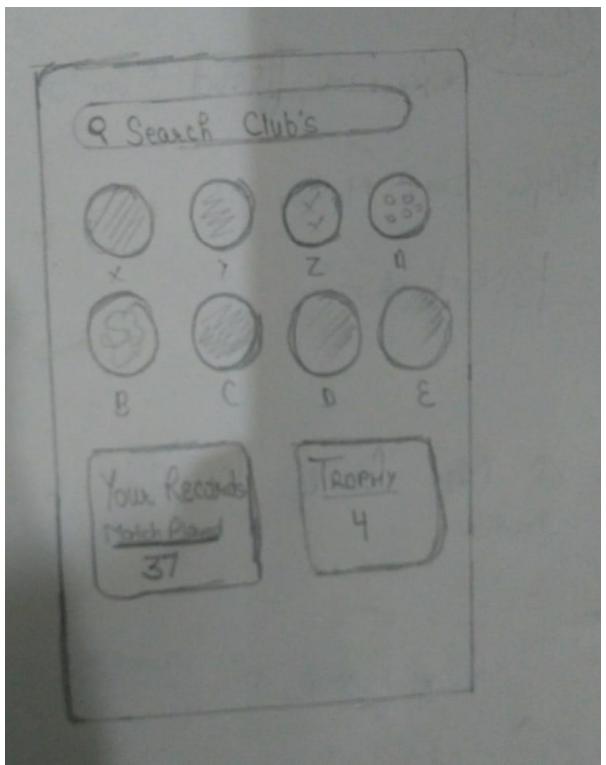
Low-Fi Prototyping

 <p>A hand-drawn sketch of a mobile application's landing screen. At the top is a logo placeholder labeled "LOGO". Below it is the title "PLAYER HUB" in large letters. Underneath the title is a "Welcome" message with a small icon. There are two main buttons: "LOG IN" and "SIGN UP". A checkbox labeled "Accept Policy" with a note "For more details Click Here?" is positioned near the bottom left. On the right side, there are links for "Name of Org", "Existing Account?", "New User", "Policy Of Org", and "For Help". Arrows point from the text labels to their corresponding elements on the screen.</p>	 <p>A hand-drawn sketch of an account creation or login screen. It features a header "Account" with a circular profile picture placeholder. Below the header are three input fields: "Name:", "Username:", and "Password:". To the right of each field is a label: "USER NAME", "USER-EMAIL", and "Password" respectively. Below the password field is a "Forgot Password?" link. At the bottom are two large buttons labeled "GAMER" and "ATHLETE". Arrows point from the text labels to their corresponding elements on the screen.</p>
<p>The first Page on downloading</p>	<p>User signs up or logs in and starts his/her Journey</p>



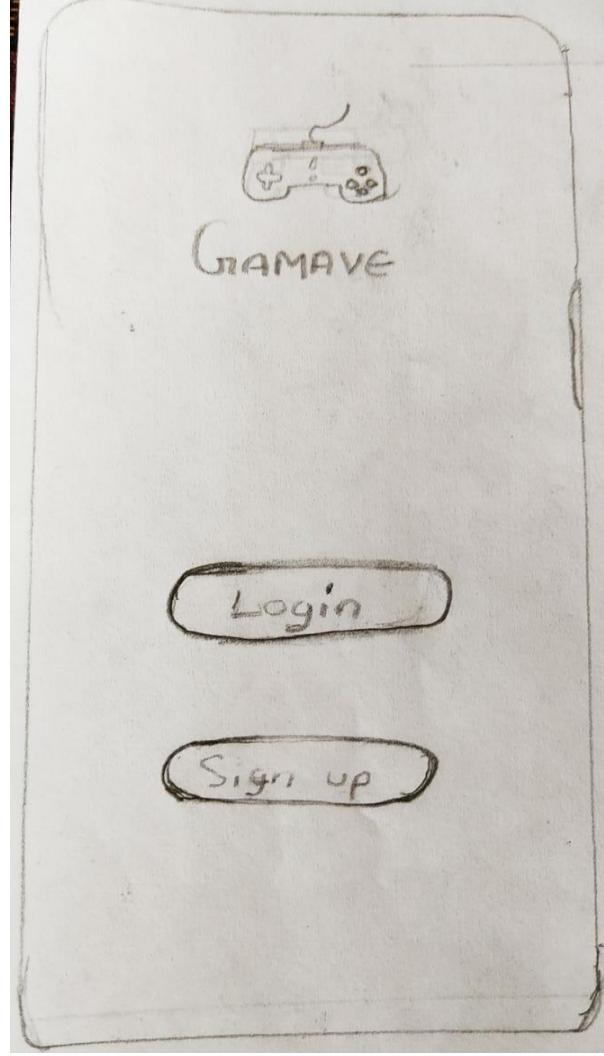
Online gamers- Select the community (through the search engine) you want to join or create your own community. You can also check out the trending games.

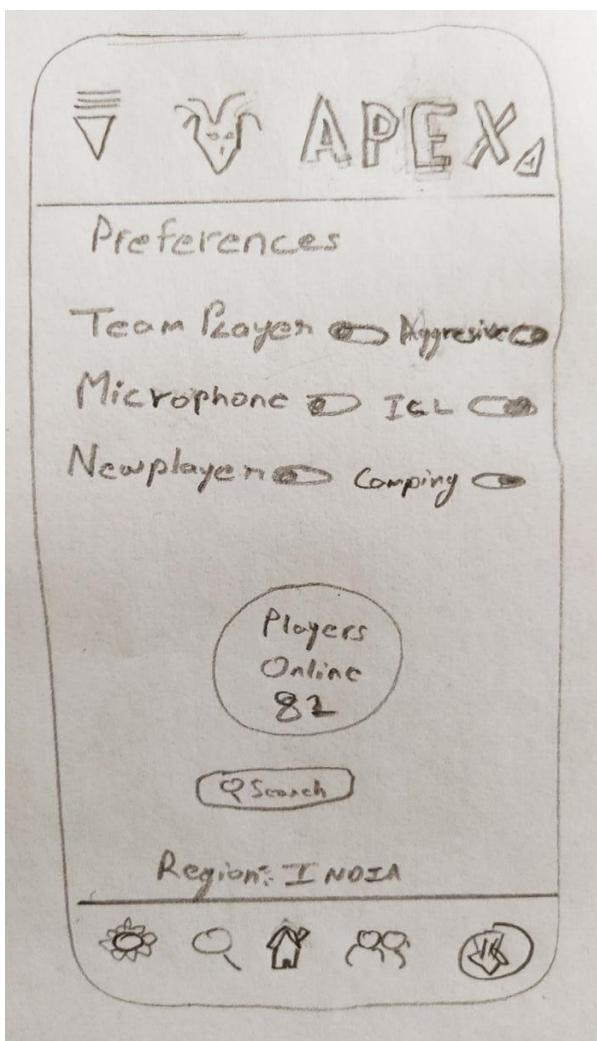
Online gamers- here you can go to your community page where you can find your friends, donate money and connect with them



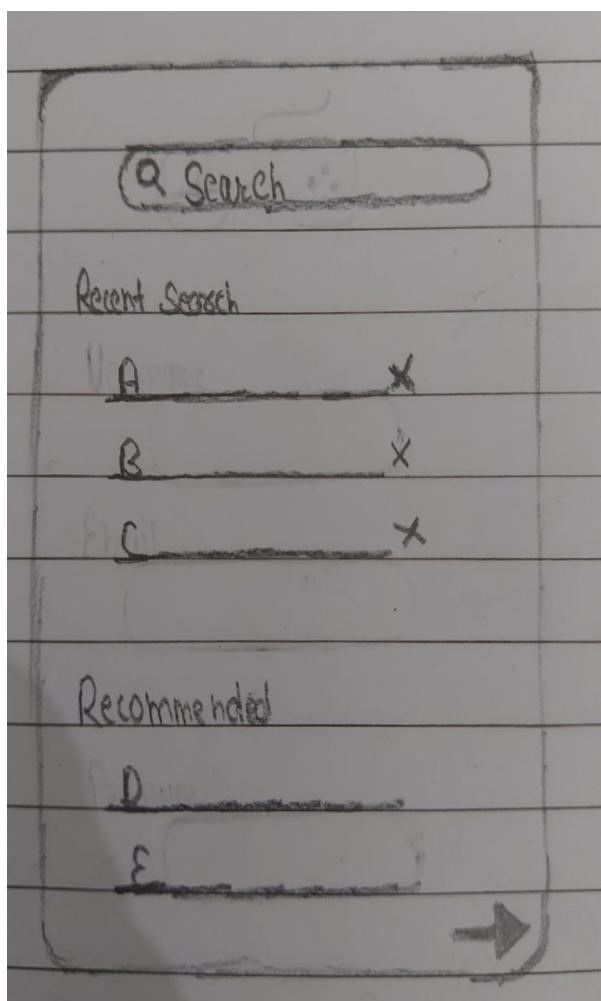
Where you can join communities or search for them Also, you can look at matches played and trophies won.

LOW_FI 2:

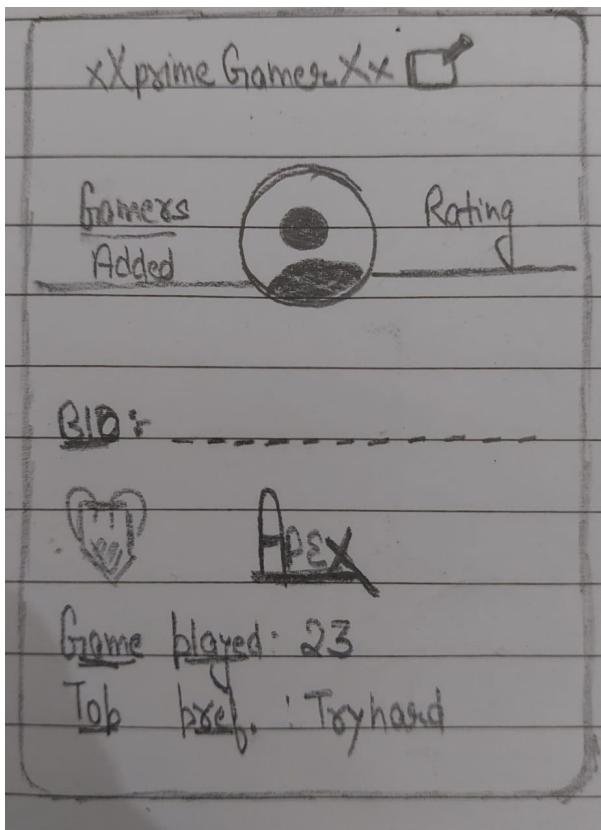
	
The starting page for the App :)	From here, you can Login in to your existing account or sign up as new player



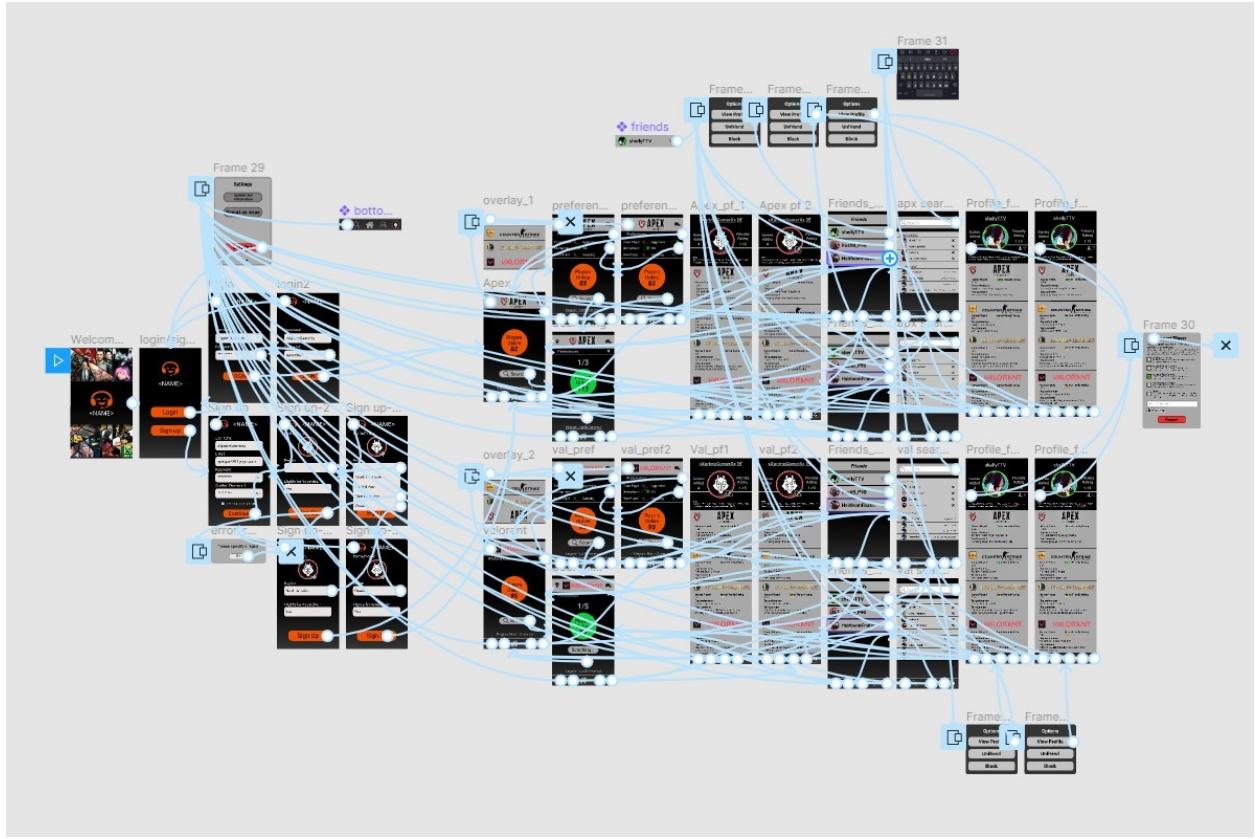
Here you can search for different players. You can also search for friends. There is a quick access option for your most frequently played game.



Here you can see the trending games and players.



Here is the main profile which you are able to see person rating, bio like stuff.



Zoom in to see labels

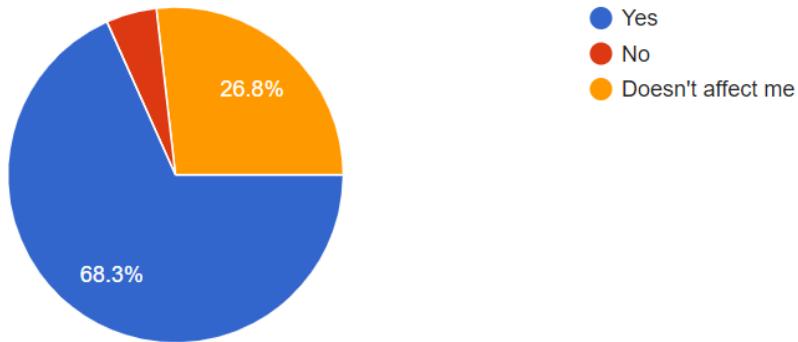
High level prototype above->

Evaluation:

Evaluation is an interactive part of Interaction Design, and we have been doing it throughout the course of this project. We put out 2 surveys. The first one was to evaluate the soundness of our ideas and our understanding of the problem space. We kept questions such as these to evaluate our current understanding and the conceptual model.

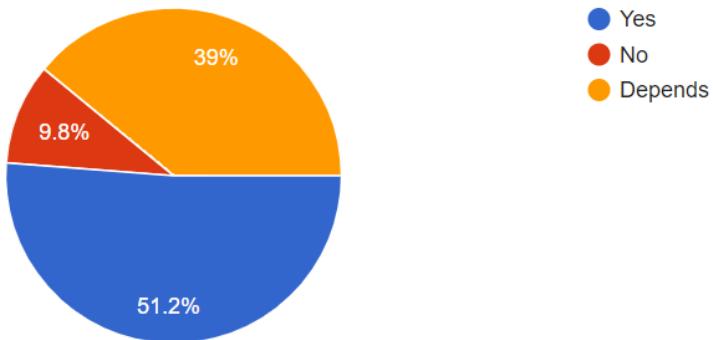
Would you like a system which tells you the ratings and preferences of players so that you could find a suitable gaming community?

41 responses



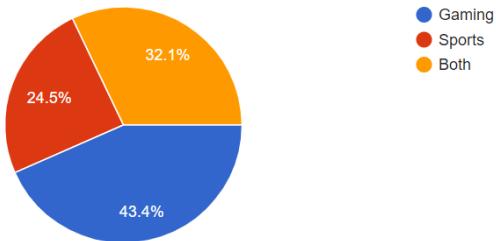
Would you like a system that suggests you gamers in real time, based on your preferences?

41 responses



Are you interested in Sports or Gaming?

53 responses



We had initial ideas of implementing a similar solution for outdoor sports too. However, we withdrew this idea, after looking at lower potential user enthusiasm in sports. During the course of our evaluative interviews, we realised that security would be a major factor that would determine the usability of our apps(even for gaming).

Due to the lack of safety in our planned application for offline sports coordination, we called off that plan and zeroed in on the online gaming idea. The offline plan had the potential to endanger the lives of users' when they go out to meet strangers(relative) and play(many such cases of cyber-terrorism).

Now, coming to our prototypes, we discussed and debated the various features and parts of the whole application.



This was a lofi sketch/prototype of our thematic homepage. After evaluation and user reaction testing, we realised that the visibility using this theme page was rather poor.

The upper part was rather unused and the bottom part of the page was overloaded. There were complaints about aesthetic appeal too. The square buttons took up a lot of space. The vision focus of the user generally scans the top of the page and then goes down.

This principles' inapplication seemed to be felt by the users. Therefore, we made sure to use the upper end of the screen too.

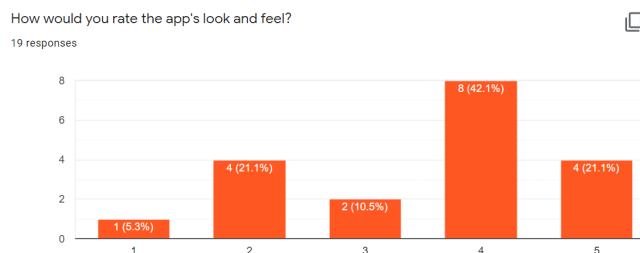
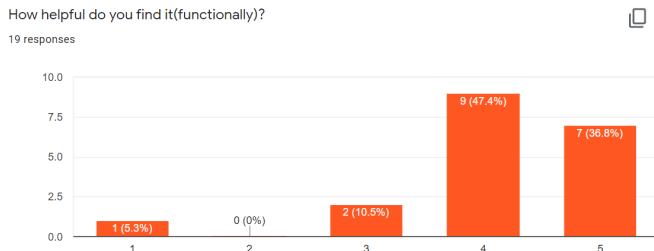


As we can see here, our final product has a quick access bar to the most played games at the top. The clutter on the screen has been sizably reduced, while still keeping a large number of options that the user can conveniently use.

In this journey of evaluations, we got lots of comments and suggestions. However, while we made amends to accommodate most of them, we still stuck to our original plans on a couple of issues. Even in the feedback form, one of the suggestions was to increase the socializing parameters in the app, by adding open game feeds ,etc. However, we deliberately chose to keep the functionalities of the app to a minimum, so that the main motive of the app is not lost.

If the app is filled with feeds and forums, our ability to moderate the app would reduce and hence fail us in our primary motive i.e. a secure and friendly environment for our target users.

Many other features and actions were modified too. Like the preferences bar in the above picture. The preferences bar did not have an option to pull down or pull up, except for the small arrow to the right. The users would find it difficult to click and pull down. Looking at this we made the pull down menu, a one touch pull down(cones down on one touch).



At the end of the process, we definitely feel that evaluation helps improve the app. The above image from the final evaluation survey form. The general feeling was that the app would cater to the core needs of the user.

Link of evaluation form:

https://docs.google.com/forms/d/e/1FAIpQLScQn8emIpkSz11fEqp7WEIHvqNKpPlNid1mQWL5ajyOmgKgFw/viewform?usp=sf_link

FUTURE WORKS:

1. Establishing communities. Help in coordinating inter-college online sports where people can make their own college group and compete with other college communities(replicate this idea for other institutions such as clubs and schools etc.). Our system helps reduce spamming and griefing significantly by means of providing reviews of people played and their friendliness index. A significant seed user base is necessary to make this project successful. These are some of the methods we plan to use.



2. Creating Children friendly Applications- so that it is accessible especially to users ages(10-16). So that our application is accessible to each and every young gamer. One of the latest trends in mobile phones is the wave of smartphone apps, which include game-based social skills and collaboration apps for young children.

3. There is also a need for an app which takes care of the physical and mental schedules for regular gamers. This is undoubtedly a major issue in the gaming world. Mental health apps are necessary to give gamers regular and friendly reminders, so that they do not forget to take care of themselves. Some possible ideas could be reminders after long gaming sessions and in game points for taking regular breaks(such as the Pokemon idea in the semester ID book).

4. We also aim to expand our target games from only action to strategy. Games such as Dota have dedicated apps, however, common community discussions are hindered due to lack of suitable platforms. We are also looking into adding sports and simulation games such as FIFA too.

5.Silent User Base- Adults are also a major user base(above 34= 40% of gamers). We aim to target them too. Games such as Candy Crush and Chess are common in this age group and we wish to foster community behaviour here too.



CONCLUSION-

Through the course of this project, I have attempted to solve the existing issue of online-gamers not being able to find a common platform to connect and find partners on a convenient, time efficient and tox-free platform.

To sum up our project journey. I started off with a wide problem definition viz. Gaming and sporting community apps. However, as I proceeded with the requirements gathering and the scenario(and persona) exercises, I realised the futility of the sports idea(safety issues).

My target user base was always clear though(based on available consumer statistics)-i.e. Ages-12 to 34. The initial survey helped us in getting a clear picture into the users' needs and wants. It was clear that griefing and non-compatibility of players was a major issue for users.

We further brainstormed and figured out possible features and functionalities. A large number of lo fi prototypes were created and finally we narrowed down on what we felt would be the optimal one. Further, we created a high-fi prototype on figma(of our mobile application). There was another evaluation survey and the links to the figma prototypes were given out. Throughout the project, evaluations played a major role(be it surveys, FGDs or one to one contextual enquiries).

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