## **Group 4**

# **Requirement Analysis** $\rightarrow$ **Gaming Community**

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# **Requirement Analysis**

# **Functional requirements:**

### 1. Welcome page:

- Interactive icons clearly visible to users which will guide them to 3 major sectors: game store, accessories shop and streaming.
- The navigation bar will also have this options along with search bar for quicker access to any location on the system
- There will be login and create account option

#### 2. User profile:

- User must create account to access the games, accessories store and to upload or stream
- They can create account using gmail, facebook or unique user\_id and password
- Every user will have their own dashboard where there will be history for purchased games.
- The dashboard will also show stats of the tournaments they have participated in.
- User should be able to add their shipping address for the delivery of the accessories
- The users can communicate with other users via chat option and they can add other users as friends.
- The users can share their in-game clips/photos of their best moments.
- The users can stream their gameplay.
- Users will be notified for any gaming tournaments and can also participate in them
- Their progress on the tournaments will be recorded as they will be given discounts based on their achievements
- Top users will get the chance to meet the best gamers and their favorite streamers around the world

#### 3. Game Store:

- The system will have a shop site where games with price tags on them are available
- Games are categorized in different libraries in the store
- The game rating will be shown
- The system requirements for each game will be displayed once a user clicks on it
- Short gameplay clips, trailers will also be available
- Special offers will be provided seasonally
- Gift cards being available
- Different payment methods will be available during checkout

#### 4. Accessories store:

- Gaming Peripherals can also be bought from the store.
- Customer will be shown a variety of featured products upon visiting this section
- They can browse any products according to their categories
- They can also search for a product
- They can request for a product

- Local sellers will post their products on this platform
- 'In stock/ out of stock' status will show for each product
- customers can choose product quantities based on availability
- Different payment options will also be available here

### 5. Streaming site:

- Any user can watch stream without having any accounts
- To support a streamer by donation, a user must login to the site
- They must also log in like, and comment on any streams or videos
- User can upload any gameclips of their on from their profile
- They can also livestream
- Some exclusive streaming will have pay-per-view option
- User can earn from their videos and streams if they allow advertisements to be displayed

### 6. Admin profile:

- The admin page will provide user details/history.
- The admin page will be notified if any user breaks any of the protocols of the system.
- Admin can ban users if they are accused of breaking any protocols.

### **Non-Functional requirements:**

### 1. Operational:

- The streaming and game installation should be able to run only on pc (both windows, MacOS).
- Gaming accessories section can be accessed through both pc and mobile devices.
- Game booking can also be done on mobile phones. So, if there is a limited sale on a specific game and the user is away from their computer, they can still purchase the game through other platforms.
- Admin will constantly monitor site statistics to ensure that users have the best possible experience.

#### 2. Performance:

- The system must have a good server that can handle a large number of active users without crashing.
- All of the sample in-game photos and gameplay videos should be well optimized so that they load faster.
- Moving from one page to another should take only a few seconds.
- The system should update every 30 second interval in order to keep the user up to date on everything.
- The sample photos and gameplay videos in-game should be of the highest quality.

• The system should use less memory.

#### 3. Security:

- Users' accounts will have two-factor authentication for best protection.
- Users will be notified whenever their account is logged in from an unknown device from a different location, and they will also be able to see active devices where the account is already logged in.
- A single email address can only be used to access one account.
- Payment gateways must be authenticated and secured.
- Only admins can see a user's name, email and other personal information.

#### 4. Cultural and political:

- The system should be able to distinguish between Bangladeshi Taka, USD and other payable currencies.
- The system should support multiple languages.
- The system will not employ any icons that might be considered inappropriate to any of our target markets.

### 5. Maintainability:

- The data must be rolled back to the state it was in prior to the session if an update fails.
- After an update the computer should not exceed more than one minute to restart.
- Automation informs users of the release of a new version.

#### 6. Usability:

• When the screen is minimized, the layout must adjust right away to fit in the new dimensions.

#### 7. Portability:

- All three major functionalities of our system will be available to any type of platform in the next iteration.
- Mobile gamers can also acquire and download their games through our platform in near future.
- They should also be able to sync their phone with a pc to stream their mobile games.