
Software Requirements Specification

Multiplayer Strategy Game

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1. Introduction

1.1 Purpose

This document describes the requirement and specifications for Multiplayer strategy game like Dota, Clash of Clans, Valorant etc.

1.2 Document Conventions

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1.3 Intended Audience and Reading Suggestions

The document **is meant** for all the customer and the developer (designers, testers, maintainers). The main audience is assumed to have the basic knowledge of how to play a game and knowledge about the controls of games. Knowledge and understanding of UML diagrams **is additionally** required.

1.4 Definitions, abbreviations

1.4.1 Definitions

- **Strategy Game**

Multiplayer strategy game is a game which player plays through the internet or any other computer network available.

- **Account**

An account stores information of users(customer) and each player(customer) can only have one account through one E-mail id. It stores number of games played, number of games won, and all the other characteristics of games played.

- **Customer**

The owner of account is called Customer. To each account only one customer is related, it can't relate to more than one person or any group.

- **Payment**

Buying things in game for better animation and experience is important. The payment for that can only be done online by using UPI, net banking, or debit card. After the completion of payment, customer will be able to access to game cosmetics and skins.

1.4.2 Abbreviations

Throughout this document the following abbreviations are used:

=>Cvv- Card Verification Value

=>Otp- One Time Password

=>E-mail- Electronic Mail

1.5 Project Scope

A customer cannot have **over** one account and card with similar E-mail id. Gamers can login with E Mails **which can** give them exposure to play with their friends online.

2. Overall Description

2.1 Product Perspective

The game will give complete access to the customer and will allow them to play multiplayer strategy game. The opponent **is often** selected randomly in multiplayer mode or customer can select his/her friend. The gamers **also can** play game in offline mode in which progress will not be count.

Gamers **are going to be** allowed to see the profile of others players, make teams, join tournament, put Reviews.

2.2 Interfaces and Network

Gamers communicate through internet across the globe. gaming network does not work independently. It requires a channel attached to multiple computers over a wide area network.

2.3 Design

The game should be designed in such a way that there is no difficulty in uploading newer version games with same interface. It should target people above 10 years as new generation is very much into this.

2.4 Maintenance

The most important part is maintenance. Maintainer is responsible for adding new features to game and features as well as maintaining all the record of the users.

2.5 Assumptions

Some assumptions developing website are-

☐ Internet speed should always be good

☐ Hardware should never fail

Diagrammmmmmmmm??????????

2.6 Product Features

*The game will give complete access to the customer and will allow them to play multiplayer strategy game. The opponent **are often** selected randomly in multiplayer mode or customer can select his/her friend. The gamers **also can** play game in offline mode in which progress will not be count. Gamers **are going to be** allowed to see the profile of others players, make teams, join tournament, put Reviews.*

Diagrammmmmmm **DFD**

2.7 Design and Implementation Constraints

- => Login Validate Gamers email
- =>Validate user id and password
- =>If user id/password is incorrect, prompt error message “user id/password is wrong”
- =>Validate for forgot password
- =>Ask for the details of the email.
- =>Ask for OTP
- =>Update user id/password

2.8 Assumptions and Dependencies

- Some assumptions developing website are-
- =>Internet speed should always be good
 - =>Hardware should never fail

3. Specific Requirements

3.1 Functional Requirements

A functional requirement defines a function of system or its component, where a function is described as a specification of behaviour between outputs and inputs.

3.1.1 Functional requirement 1

Sign Up-

Input- The user needs to provide his/her complete details, if there is no previously created account.

Output- A new profile is created for the gamer.

Processing- New account is generated.

3.1.2 Functional Requirement 2

Login-

Input- The user needs to provide his/her username and password to login.

Output- If correct details are entered then successful otherwise a wrong message will tell them wrong username or password.

Processing- They will be logged in and directed into the game.

3.1.3 Functional Requirement 3

Payment-

Input- To buy game cosmetics and payment must be done online. Card number, card type, expiry date and CVV is provided for the process.

Output- An OTP is received which need to be provided for authentication, then, you can play.

Processing- Money will be deducted directly from bank account.

3.1.4 Functional Requirement 4

Profile-

Input- Make a default gamer profile and keep updating it according to the achievement of users/gamers.

Output- It should display the profile of customer and different characteristics of it.

Processing- Record should be maintained that number of games played, number of times won.

3.1.5 Functional Requirement 5

Options-

Input- The game must contain multiplayer mode, offline mode and help options

Output- Multiplayer mode should give access to game which will be played online through internet.

Processing- Help option should be useful in solving the query of user.

3.1.6 Functional Requirement 6

Offline-

Input- Customer needs to download offline game within game for playing offline

Output- Can be played further when there is no internet connection. There will be no multiplayer mode in offline game, as it can be played by a single player.

Processing- Games will be downloaded and played offline. Gamer can enhance his/her skills in offline mode.

3.1.7 Functional Requirement 7

Chat Now-

Input- Customer needs to tap the chat button and needs to select option of chat if they want to do text chat to his/her friend.

Output- The players can chat to each other while playing a game. It can be their ingame friends or unknown players.

Processing- This will let them make strategies and know about each other for better synergy.

3.1.8 Functional Requirement 8

Analysis-

Input- In database the score of players will be compared with players within the friend list.

Output- Their score and rank will be calculated and will be displayed.

Processing- Performance of player is done graphically.

3.1.9 Functional Requirement 9

Review-

Input- The users can provide their feedback about the game by commenting their opinions.

Output- Their feedback will be stored and reviews will be displayed.

Processing- The storage of data is carried out.

4. External Interface Requirements

4.1 User Interfaces

The customer user interface should be intuitive, such that 99.9% of all new users are able to complete their signups and enhance their gaming experience without much assistance.

4.2 Hardware Interfaces

Hardware Interface

The hardware should have following specifications:

- ☐ Ability to read the profile of the gamer
- ☐ Ability to access all the games falling in the respective class of the gamer.
- ☐ Assistance given wherever needed
- ☐ Continuous power supply
- ☐ Ability to connect to server at the mentioned internet speed.
- ☐ Ability to access multiplayer mode
- ☐ Ability to validate user and allow user to add friends
- ☐ Once login user must not be required to ask to re-login to the same system at the same time.

4.3 Software Interfaces

No additional software is required to access the website. You just need network access softwares to access to internet and get into the network.

5. Other Nonfunctional Requirements

Performance Requirements

- ☐ It must be able to perform in adverse conditions like high/low temperature etc.
- ☐ Uninterrupted connections
- ☐ High data transfer rate.

Safety Requirements

- ☐ Must be safe enough to avoid any data loss
 - ☐ Must not leak the card details of any user.
 - ☐ There must be an auto checker assigned to check any unidentified action of the user
 - ☐ Secured enough to stop hacking at maximum instances
 - ☐ The personal details of the user must not leak if user wants to keep it personal
- No leakage of confidential data from the website
- ☐ Bug tracking must be there

Security Requirements

- ☐ User accessibility is censured in all the ways
- ☐ Users are advised to change their password on first use
- ☐ Users are advised to not to tell their password to anyone
- ☐ The maximum number of attempts to enter password will be five

[After that accounts will be temporarily locked]

Availability

The website has to be accessible 24 hours a day

1. It must be impossible to plug into the network.

Maintainability

Only maintainers are allowed to connect the website for maintenance.