**Requirement Specification**

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1. **Report**

The whole report is available [here](Report.docx).

**1. Introduction**

The blank team is a worldwide known developer team that is capable to achieve the highest heights, due to its strong connection between the members and the extensive experience in the programming work field. The team contains 5 trustworthy, young developers, who are eagerly helping out each other and solve problems together. The team was formed in 2010 with only 3 members but has outgrown itself quite soon, thanks to the successfully created projects.

The current project is an online multiplayer hangman game, in which people can register to a website, login, and play matches against each other, coming up with their own word ideas to the opposing person.

members:

* Barkóczi Martin
* Dombi Tibor
* Farkas Balázs
* Szegedi József
* Tóth Noémi

**2.Current State**

Everyone has always liked the famous hangman game, due to its low difficulty and the joy it spreads among people. Despite these charming aspects, the game itself had not got a great online multiplayer platform. People use a piece of paper and a pen or pencil to play. It is very ineffective, since playing on a paper makes our paper storage empty just in a minute or two, and in the long term, it can lead to the disappearance of several rainforests and natural habitats. The players usually play alone, with low multiplayer possibilities, which can be quite frustrating and can lead to depression. Therefore an online platform shall be created for this amazing fun activity, including solo, and multiplayer mode.

**3****. Target Goal (Scope)**

Our goal is to develop a web application for the client, that could make the hangman game popular with new possibilities and amazing game modes. The user has to provide their data to register. These informations are going to help us making statistics and improving the user experience. The game has four differnet game modes:

* **Hangman Worldcup**: It is a multiplayer mode, where players around the world can play against each other in a competitive way. The Worldcup has an elimination race, where the users play one by one, and in the final, the two top players play a final match.
* **Practise Mode**: There is an easy way to practice for every user to develop themselves. In the single player or practice game mode, the person needs to find out the words that the computer generates randomly from the game database.
* **Cooperative 1v1 Mode:** It is a really fun game mode, players have the chance to play with their friends in a divided screen. They have to guess words given by the opponent. The fastest one wins the game.
* **Campaign:** From time to time the Hangman game will introduce the story mode of the game, wich is going to be a story-based campaign adventure, where the best conquerors will get precious gifts.

The background of the application is goign to be a huge database, with the pieces of information about the registered users and the necessary items to the gameplay. The database will serve us important statistic values, so we can easily see how many match was played in the given day or week, what is the number of the current user base, and with these informations, we can make statistics about the popular game mods and which country has the biggest number of players. If the program gets some server issues in the multiplayer mode, it will send emails to all the users of the game. Furthermore, the application has a Sponsor page, where people who support the emergent system, the functioning and the user's prizes and the defense of the datas, will receive their proper regards.

**4. Standards, laws**

As a web application, we have to follow a number of standards.

General Standards

Application must meet the following general standards:

1. Must be easy and intuitive to use for the target audience.
2. Must function in a logical manner for the target audience.
3. Must use the industry best practices.
4. Must use styles that are consistent throughout the application and within the associated Web site, including:
   1. Error messages must appear in a consistent location and style and must provide sufficient information.
   2. Form controls that are not available must be hidden.

Development Technology, Programming Language, and Web Server Software

Web application requires the use of the following (or higher) technologies:

* Java SE 13
* MySQL 8.0
  + MariaDB 10.1.38

Recommended IDE:

* InteliJ Idea 2019.2.3 or
* NetBeans IDE 11.1

Minimum Browser Standards

Web application must function and display properly in the following browser versions:

* Internet Explorer 11.0
* Mozilla Firefox
* Apple Safari
* Google Chrome
* Microsoft Edge
* Opera

The application require the Web browser to support Javascript and to accept session-based cookies

Application Testing

Web applications and sites must be thoroughly tested in all required browser versions in screen resolutions of 800×600, 1024×768, 1360×768 and 1920×1080.

**5. Current business model**

At the moment the customer has a working website, which provides every necessary information about the championship, Although playing is not yet possible. Our current project aims to extend the functionalities of the current website by providing a playable game in the browser.

**6. Requested business model**

**Pre-conditions**

* Both parties need internet connection to register, login and play matches.
* A server is required for the application to function properly.
* gettign sponsors is a crucial point in the game development.

**7. Request list**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Modul** | **Id** | **Name** | **v** | **Description** |
| Database | D1 | Database planning | 0.1 | Database, tables, relations |
| Authorization | A1 | Log in | 0.1 | Log the user in |
| Authorization | A2 | Register | 0.1 | Register new user |
| Game | G1 | Generate word | 0.1 | Get random word from database |
| Game | G2 | User interface | 0.1 | Design GUI |
| Game | G3 | Game Mechanics | 0.1 | Implement mechanics |
| Championship | C1 | Championship | 0.1 | Championship implementation,1v1 mechanics |
| Site | S1 | Sponsor Page | 0.1 | Site about Sponsors, About, Social Media? |
| Site | S2 | About Page | 0.1 | Description of the game, how to play, etc |
| Game | G4 | Game Page | 0.1 | Interface of the actual game |
| Statistics | St1 | Statistics Handle | 0.1 | Store data about login, matches played, etc |