



DESIGN DOCUMENT

FOR

DS Project

26 September 2021

OVERVIEW

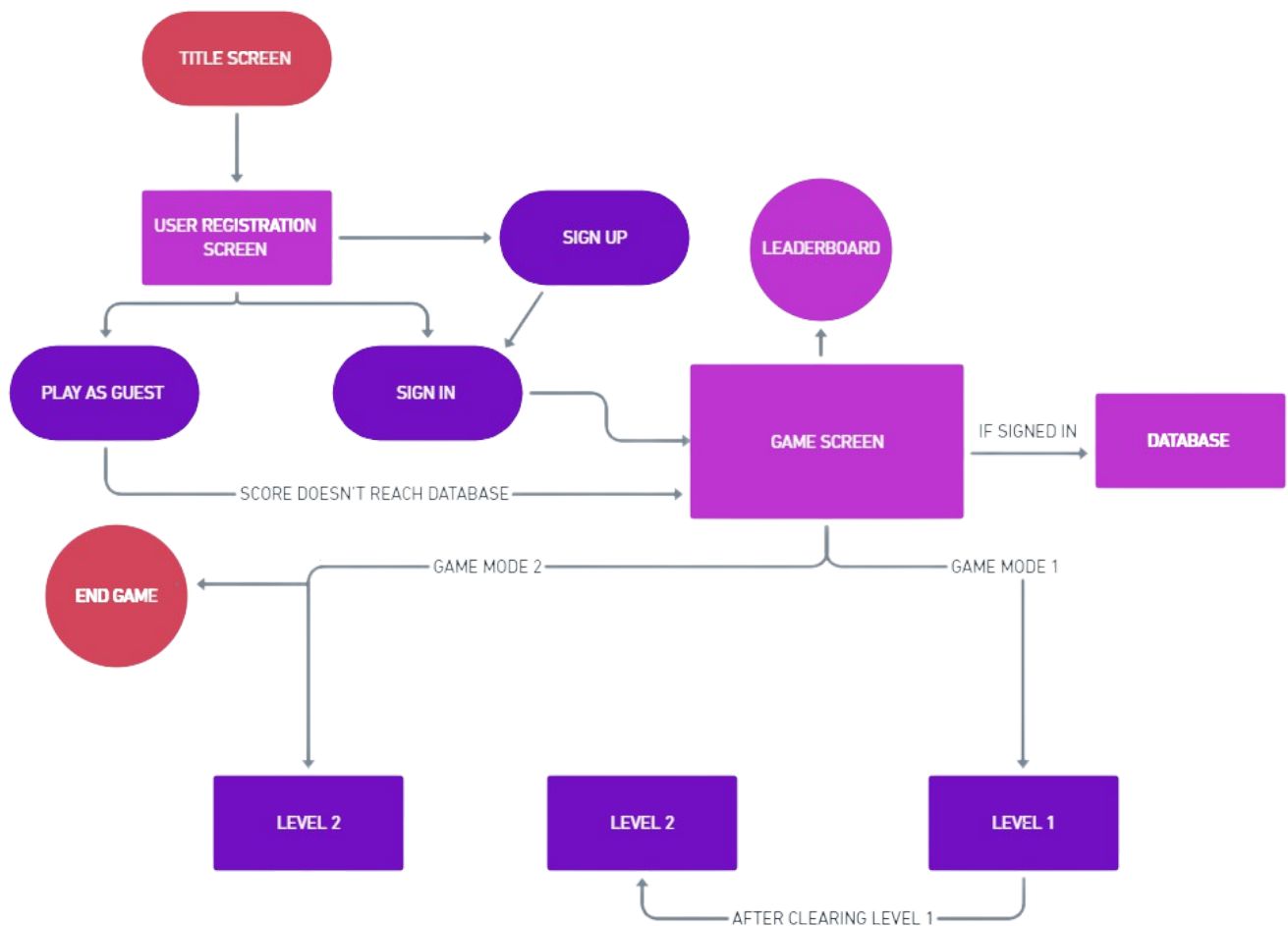
Project Name: **Falling Rocks**

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Project Developers:

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FLOW DIAGRAM



DESIGN ELEMENTS

Title Screen :

The title screen of the game shows the title of the game and then the screen changes to the user registration screen.

User Registration :

The user who enters the game has a choice to play by signing up, signing in or as a guest player.

Sign Up :

The user who enters the game for the first time has an option to sign up so that his data can be saved for future sessions. He/She has to enter an email id and a password.

Play as Guest :

If the user doesn't want to enter the scores in the database using an email id, he has an option to play as a guest and his score won't be recorded for future sessions.

Sign In :

The user who enters the game as already signed up has the option to choose to sign in (to play online) and play as a guest (to play offline).

Game Screen :

In this screen the user will start playing the game. If he manages to shoot a falling rock then he'll gain points and when he achieves a certain score he can level up to the next level, which will be comparatively difficult.

Game Mode 1:

If a user enters game mode 1 he can't play level 2 unless he has completed level 1.

Game Mode 2 :

The user can enter level 2 directly without playing level 1.

Level 1 :

This level will have the falling rocks at a comparatively slower speed and the density of the rocks will also be lesser.

Level 2 :

This level will have the rocks falling relatively faster and the density of the rocks also increases.

Leaderboard :

We also aim to create a leaderboard. The leaderboard will be of two types: private and public. The private leaderboard will house all of the user's previous scores, in a chronological manner. Meanwhile, the public leaderboard will house multiple users' scores with their respective ranks.

Database :

The database will have the information related to a user email ID, user password, user high score attained in the previous session.

WORK DIVISION

We aim to complete the project within 3 months. The work division will be on the basis of the project elements that we aim to develop.

As mentioned the 2 major parts of the project are as follows:

1. User Registration and database handling
2. Game development including levels and modes.

At the initial level, we have decided that 2 of the people in the team will work on the user registration process and database design and 1 will work on the game. We have also decided to review each other's work and understand the codebase on a weekly basis. We will rotate our positions fortnightly so that everyone in the team can understand the entire project and is capable of handling and managing group projects in the future.

Both the parts of the project will be done simultaneously and the linking of the two parts will be done at the end by all the members of the team.

FUTURE SCOPE OF THE PROJECT

Once we have achieved what we aim well before the tentative timeline of the project, we might incorporate the following features-

1. New objects in Level 2 like bombs
2. Major sound effects