

HÁSKÓLI ÍSLANDS

HBV601G

SOFTWARE PROJECT 2

TEAM 5

Project Plan and Requirements

Mobile Rhythm Game

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1 Business requirements

1.1 Background

Gaming in mobile devices is an big industry with a low barrier for entry.

We think a simple but challenging rhythm game that anyone can jump in and try out easily on their phone or tablet fills a niche that is yet to be overly saturated.

Musical rhythm Games such as Guitar hero, and more recently Osu!and Beat Saber have become wildly popular and shown the demand for games based music driven inputs from the player.

The idea of creating this game came in a group meeting. One member has had an idea for an app like this in the back of his head for a while, and another member has played rhythm games quite a bit, specifically Osu!, and was interested in trying to create a rhythm game of his own and thought his experience with the genre would be useful to the process. The idea appealed to the rest of the group because it's not just a simple reskin of an existing game and will hopefully prove more engaging as a project because of that.

1.2 Vision statement

For users who like rhythm based music games

who want to be able to play such games on their mobile device

The Finger Dancing game

is a mobile app

that offers a fun, simple and challenging musical experience., which includes music and trying to keep up with a rhythm by pressing notes / buttons on the right time. each time a note / button is pressed you get a point but the user needs to hit a several buttons to get to the next level, each level passed the rhythm gets harder, when wrong note is pressed the game is over, and user can start again or exit .

Unlike Guitar hero and beat saber, our game will have a simpler interface and will be designed for mobile devices. While the alternatives have notes/blocks pass towards player which need to be hit when they reach him, our product will instead be mostly 2D, with the screen divided into a few different tiles to represent different notes.

Our product will offer users on the go a quick and interactive dose of music and rhythm.

2 Scope and limitations

2.2 Scope of initial release

The initial release of this product should contain the following core features:

- The app should have a main menu.
- The user should be able to create and sign into a personal account.
- The user should be able to play a basic version the game.
- The app should contain a personal high scores for every user.
- The app should contain global high score for all users.

3 Backlog

3.1 Product Backlog

User story	Sprint	Priority	Best Case	Most Likely Case	Worst Case	Expected Case
As a user I want a main menu to access all the features that the game has to offer.	1	10	3,75	6	11,5	6,54
As a user I want to be able to start a game from the main menu.	1	10	2,75	6	10,25	6,16
As a user I want to be able to press on notes that appear on the screen.	1	10	3,5	6	10,25	6,29
As a user I want the notes to appear in sync with the rhythm of the song.	2	20	3	6,75	11,75	6,95
As a user I want to see upcoming notes so that I don't need to memorize where each note will appear.	2	20	3,5	7,25	12,25	7,45
As a user I want to get feedback on whether I hit or miss a note.	2	20	2,75	5,25	8	5,29
As a user I want to lose the game when I miss too many notes.	2	20	2	3,5	6,5	3,75
As a user I want to see how many points I got from successfully hitting a note.	2	20	2	4	7,5	4,25
As a user I want to see my current score while I am playing.	2	20	0,5	1	3,25	1,29
As a user I want to see a high-score list pop up after each game, with my new score in it.	2	20	3	7,5	11,75	7,45
As a user I want to be able to choose to play again or go back to main menu after I lose a game.	2	20	2,5	4,25	8,5	4,67
As a user I want to be able to create an account.	2	20	3,5	8	14	8,25
As a user I want to be able to login to my account.	2	20	1,75	3,75	8	4,12
As a user I want to be able to view the high-score list from main menu.	3	30	1	2,75	4,5	2,75
As a user I want to be able to toggle between global and personal scores in the high-score list.	3	30	3	5	9	5,33
As a user I want to be able to choose whether to have vibration on or off.	3	30	0,625	1,5	3,75	1,73
As a user I want to be able to choose to hear feedback sound each time I hit a note.	3	30	0,625	1,25	3	1,44
As a user I want to be able to mute the game.	3	30	0,875	1,25	2,75	1,44
As a user I want to be able to offset the song's start time to be later or earlier, so that it matches the input lag of my device.	3	30	1,5	2,66	6	3,02
As a user I want to be able to pause the game.	3	30	1,5	3,25	5,25	3,29
As a user I want to be able to go back to main menu from the pause menu.	3	30	0,625	1,25	3,5	1,52
As a manager I want to be able to delete a score off the high-score list.	3	30	0,75	1,25	2	1,29
As a user I want the game to have varying difficulty levels.	3	30	7	12,75	23,25	13,54
As a user I want an interface to add my own songs to the game and define tempo and beats for them to be playable.	4	40	9,5	16,25	28,5	17,16
As a user I want to be able to choose between songs to play.	4	40	1	2,75	5	2,83
Total						127,8

4 Time Schedule

School Week	Date (From)	Date (To)	Project (Our)	Project(Code rev)	Return As-signment	Presentation	Sprint	Milestone
1	2020.06.01	2020.12.01	requirements					
2	2020.13.01	2020.19.01	requirements					
3	2020.20.01	2020.26.01	requirements					
4	2020.27.01	2020.02.02	requirements		ret. 1			
5	2020.03.02	2020.09.02	design/core			expl. 1	1	
6	2020.10.02	2020.16.02	design/core/ programming				1	
7	2020.17.02	2020.23.02	design/core/ programming				1	design model, android studio core architecture, signup, login, main menu
8	2020.24.02	2020.01.03	programming		ret. 2		2	
9	2020.02.03	2020.08.03	programming	code rev.		expl. 2	2	
10	2020.09.03	2020.15.03	programming	code rev.			2	
11	2020.16.03	2020.22.03	programming		ret. 3		2	runnable game, initial release
12	2020.23.03	2020.29.03	programming			expl. 3	3	
13	2020.30.03	2020.05.04	programming				3	
14	2020.06.04	2020.12.04	programming/ prepare demo				3	varying difficulty levels, settings
15	2020.13.04	2020.19.04	demonstrate/ programming		ret. 4	expl. 4	4	
16	2020.20.04	2020.26.04	programming				4	interface to add songs