

Plymouth University

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Development

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The Melody Slayer

Disclaimer

This is an ideas document for the final report, and not an actual final report draft. Please treat it as such.

Abstract

This report is made to explain the planning and implementation behind The Melody Slayer, a rhythm-action game where you fight against bosses using common rhythm gameplay. This project was picked to further enhance my knowledge of rhythm mechanics and to see if it was possible to invoke the feeling of both accomplishing a song but also defeating a boss.

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Word Count:

2. INTRODUCTION

-Melody slayer, rhythm game based on completing songs by hitting notes to the rhythm in order to defeat levels that have a boss trying to stop you.

-Levels involve a unique song and a mechanic that is also unique to the boss, which usually involves distracting or deceiving the player

-Project originally used much more complex mechanics before being toned down due to overestimation.

2.1 Project goals

-Gain more experience in Unity

- Understand and explore the mechanics behind rhythm games and the ways that they are created

- Gain experience in the creation of an ambitious game project and understand how to better scope projects within time limits.

3. OVERVIEW

3.1 Background

- Rhythm games and their general concepts/underlying framework

- Varieties of mechanics used to differentiate rhythm games

- Automatic map creation using audio analysis.

- The levels and their unique mechanics

3.3 Deliverables

As part of the design process, several core deliverables were outlined for the minimum viable product, along with several optional objectives.

- See PID for these

4. METHOD OF APPROACH

4.1 Project Plan

The plan was first created in the project initiation document. This laid out the project into weekly goals that focused on small features and tasks that were to be completed over the week. Most of this was carried out as expected although many changes had to be made and some tasks that were not fully completed had to carry over into the following week, which further delayed that sprints deliverables.

4.2 Version Control

Github was used to manage version control. At the minimum of once a week, the project would be updated and pushed to github in order to keep a continuous backup in case updates to the project went wrong.

4.3 Project Management

Trello was used to manage the project outside of knowing which tasks were meant to be done each week.

- Set cards that could be moved from column to column

4.3.1 Task Management

Tasks were assigned based on their priority in terms of the minimum viable product and also what tasks depended on other tasks to be completed.

4.3.2 Regular Supervisor Meetings

Weekly meetings were done between the 8th of February to the 22nd of March.

5. LEGAL/SOCIAL ISSUES

This project adheres to the University ethics policy

All music used as part of this project are under CC 4.0, in which there are no restrictions to using the music as long as appropriate credit is given, which has been adhered to

6. DEVELOPMENT

Since the development of this project was done in sprints, each section will be split into what was done during each sprint and the design choices and problems that came with each sprint.

6.1 First Sprint

The first week was spent getting used to things and setting up the framework for the unity project that would later become the game. At this stage, the project was still being developed for the original idea and as such the first feature to be designed was the player and the ability to move horizontal along a line.

- Structure for the notes, how they are stored (time, note type)

- Development of the highway

6.2 Second Sprint

- UI elements created

- This was the point where the difficulty with the original mechanics began to show. Testing found that moving along the highway and trying to hit the note at the same time, while it was functional, did not prove to be as engaging as originally anticipated.

- The idea of FFT was found and started to be implemented.

6.3 Third Sprint

- Changed original specification

-Completed Menu, but not FFT

6.4 Fourth Sprint

6.5 Fifth Sprint

6.6 Sixth Sprint

6.7 Seventh Sprint

6.8 Final Sprint

7. END OF PROJECT REPORT

7.1 Summary

7.2 Changes to Project

8. PROJECT POST-MORTEM

There were quite a few issues with the project mainly relating to how it was managed. While the planning and project management were fine, many of the desired features to begin with were scrapped due to over ambition. The workflow

8.1 Aspects that succeeded

-The design of the FFT song analysis and its implementation into creating automatic maps was surprisingly effective at how flexible it was. While it created maps that were not too creative, it did create a fun experience and eased pressure off of designing maps by hand, which would have taken far longer.

8.2 Aspects that failed

-The original concept laid out in the project initiation document was too complicated to work as a game and this caused delays in advancing the project. The original idea would have made the game a lot more unique but proved too difficult and not enjoyable for the player.

-Many art assets were not able to be made by hand due to lack of time, as too much time was spent developing features instead of designing art assets. As such, much of the game uses third party assets (all available to use) but this was not the desired outcome for the original plan

8.3 Reflection on future improvements

In the future, better time management is needed. Many aspects of the project were predicted to take far less time than actually implemented and this caused both delays and changed to the plan as well as forcing the removal of some desired features.

9. CONCLUSIONS

The project itself can be considered a minor success. The mechanics are there and the game is playable, but lacks the professionalism that you would expect from an indie game. The gameplay is adequate but is obvious that the maps were created automatically.

I believe the FFT used was effective however, and is able to create an experience that still matches the original intentions of the project.

10. REFERENCE LIST

11. APPENDICES

A PROJECT INITIATION DOCUMENT (PID)

B HIGHLIGHT REPORTS

