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| --- | --- | --- |
| Project Design Document | |  | | --- | | *10/19/2024*  Raymond Gage | |

|  |  |  |  |
| --- | --- | --- | --- |
| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *Music Keyboard Keys* | | in this   |  |  | | --- | --- | | *2D* | game | |
|  | where   |  | | --- | | *Keyboard/MIDI Keyboard* | | makes the player   |  | | --- | | *Hit falling notes* | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Note sprites* | appear | | from   |  | | --- | | *Top of screen* | |
|  | and the goal of the game is to   |  | | --- | | *Hit as many notes as possible* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *MIDI Music*  *Missed note sound effect* | | and particle effects   |  | | --- | | *Glitter particle effects as note Is hit* | |
|  | [*optional*] There will also be   |  | | --- | | *Other background elements timed to the music* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *Notes fall to music* | | making it   |  | | --- | | *A rhythm game* | |
|  | [*optional*] There will also be   |  | | --- | | *Maybe guitar hero style powerup* | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5 **User**  **Interface** |  | The   |  | | --- | | *Score* | | will   |  | | --- | | *Increase* | | whenever   |  | | --- | | *Notes are hit successfully* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Harmonic Hero* | will appear | | | and the game will end when   |  | | --- | | *The song ends.* | |

|  |  |  |  |
| --- | --- | --- | --- |
| 6 **Other Features** |  | |  | | --- | | *MIDI keyboard support (maybe). MIDI file note parser.* | |

# 

# Project Timeline

|  |  |  |
| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | * *Project opens with Rhythm Game demo asset* | | |  | | --- | | *10/20* | |
| **#2** | |  | | --- | | * *Loads MIDI files and drops notes* | | |  | | --- | | *mm/dd* | |
| **#3** | |  | | --- | | * *All basic rhythm game features* | | |  | | --- | | *10/27* | |
| **#4** | |  | | --- | | * *Menu* | | |  | | --- | | *11/3* | |
| **#5** | |  | | --- | | * *Complete* | | |  | | --- | | *11/10* | |
| **Backlog** | |  | | --- | | * *MIDI keyboard support* * *Background effects synched to music* * *MIDI file note transformation to single octave chromatic* | | |  | | --- | | *11/17* | |

# Project Sketch

A colorful hexagons with numbers and symbols

Description automatically generated