# Mobile App Developer Diary

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Sep 27 - Started the project, set up a player, and jumping controls.

Sep 28 - Added circle obstacles, and rotation on the obstacles. Also started setting up the sorting layers.

Oct 1 - Added tags for each different color segment, set up collision detection off screen for game over, and now the camera follows the upward vertical position of the player.

Oct 2 - Added a pickup that will change the color of the players sprite and put in a spawner off the top of the screen to spawn obstacles. Objects will spawn a set distance apart from each other.

Oct 4 - Added a despawner off the bottom of the screen to despawn obstacles. Added touch controls for mobile. Also added a score pickup into the spawner’s cycle of spawns.

Oct 5 - Added a score counter.

Oct 7 - Changed the camera aspect ratio to better suit mobile devices. Also stopped players from falling at the start of the game and instead have them fixed in place until the first jump. Added due to play testers input.

Oct 8 - Added more input options (up arrow and left mouse click).

Oct 10 - Added the main menu, and a new font. Added a new square obstacle to be spawned. Also added an increasing difficulty, making the rotation of obstacles increment with the players score, and made the rotation direction randomise.

Oct 18 - Added a pause menu and pause button to the game screen.

Oct 22 - Added a game over screen, navigation to and from the game over screen, and fixed the scaling of the canvas to better fit onto different screen aspect ratios. Also added a high score system and background music from a splash screen throughout the game.

Oct 23 - Added music toggle on and off from the main menu. Also added a new line obstacle to be spawned.

Oct 24 - Changed HUD, and revised score to use PlayerPrefs. Added high score reset option and tightened random variance on obstacle rotation speed. Added Facebook SDK, but have had serious problems with the build, and have decided to go a different route incorporating Facebook post option. Changed HUD to a sleeker design after customer feedback. Also tightened rotation speed variance due to tester feedback.

Oct 25 - Fully removed Facebook SDK files, and fixed canvas resize problems with different resolutions. Also, fixed problem where score value wasn’t resetting on game retry.

Nov 6 - Finally added basics to Facebook post. Also added a death animation to buffer the game over screen transition and changed the color changer object sprite to a more understandable sprite.

Nov 14 - Added the high score value to be displayed on the main menu and moved some code around to tidy things up. Added after player testers input.

Dec 5 - Added a UI element saying the player should tap to jump when the game screen begins. Added after player testers input.

## Test Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Item** | **Expected Result** | **Pass/Fail** | **Problem/Fix** |
| Sep 27 | Player | Jump on spacebar press | Fail | Player continuously jumps when jump button is held down |
| Sep 27 | Player | Jump on spacebar press | Pass | Used Input.GetKeyDown instead |
| Sep 28 | Circle Obstacle | Circle rotates on spawn | Pass |  |
| Oct 1 | Circle Obstacle | Collision detection between player and obstacle | Pass |  |
| Oct 1 | Player | Color changes on game start | Pass |  |
| Oct 1 | Player | Game over when collision with wrong color | Pass |  |
| Oct 1 | Camera | Follows players vertical position | Fail | Camera isn’t moving with player |
| Oct 1 | Camera | Follows players vertical position | Pass | Used Vector3’s y position instead of Vector 2’s y position |
| Oct 2 | Color Changer | Object changes player color on collision | Fail | Overlooked the fact the pickup needs to be destroyed on collision |
| Oct 2 | Color Changer | Object changes player color on collision | Pass | Pickup is destroyed on pickup |
| Oct 2 | Object Spawner | Spawns circle and changer objects periodically | Fail | Objects spawn constantly after player’s y position reaches 22 |
| Oct 2 | Object Spawner | Spawns circle and changer objects periodically | Pass | Limited spawn area so only 1 object can spawn at a time, and so objects spawn after player’s y position is divisible by 5 |
| Oct 4 | Despawner | Objects despawn on collision | Fail | Player is also destroyed on collision making game unplayable |
| Oct 4 | Despawner | Objects despawn on collision | Pass | Game Over state will now be called on player destroy |
| Oct 4 | Touch Input | Player jumps on screen touch | Fail | Same problem as before, continuous jumps when held down |
| Oct 4 | Touch Input | Player jumps on screen touch | Pass | Used TouchPhase.Began instead to only allow one input per touch |
| Oct 4 | Score Pickup | Spawns in spawner | Pass |  |
| Oct 5 | Score Counter | Score is updated on screen with pickup | Pass |  |
| Oct 7 | Player | Doesn’t fall until first jump input | Fail | Want to stop player from falling when game starts |
| Oct 7 | Player | Doesn’t fall until first jump input | Pass | Player has a static rigidbody until first input, then changes to dynamic |
| Oct 8 | Player | Jump on up arrow press | Pass |  |
| Oct 8 | Player | Jump on left click press | Pass |  |
| Oct 10 | Main Menu | Play button navigates to game screen | Pass |  |
| Oct 10 | Square Obstacle | Spawns in spawner | Pass |  |
| Oct 10 | Spawner | Spawned obstacles vary in rotation speed and direction | Pass |  |
| Oct 18 | Pause button | Opens pause menu on click | Fail | Button doesn’t register being pressed |
| Oct 18 | Pause button | Opens pause menu on click | Pass | Had deleted EventSystem |
| Oct 18 | Pause Menu | Resume button continues game | Pass |  |
| Oct 18 | Pause Menu | Menu button navigates to main menu | Pass |  |
| Oct 22 | Game Over Menu | Game over navigates to game over screen | Pass |  |
| Oct 22 | Game Over Menu | New game button restarts the game screen | Pass |  |
| Oct 22 | Game Over Menu | Menu button navigates to main menu | Pass |  |
| Oct 22 | Highscore Counter | Highscore is saved and displayed on game screen | Pass |  |
| Oct 22 | Highscore | Highscore is saved session to session | Fail | Score isn’t saved through session |
| Oct 22 | Highscore | Highscore is saved session to session | Pass | Used PlayerPrefs to save scores |
| Oct 22 | Splash Screen | Screen displays for a period before navigating to main menu | Pass |  |
| Oct 22 | Music | Background music plays across all scenes | Fail | Music plays over itself every time menu is loaded |
| Oct 22 | Music | Background music plays across all scenes | Pass | Moved music to begin on splash screen, so can only begin once |
| Oct 23 | Music Toggle Button | Music toggles on/off with button press | Fail | Music isn’t stopped on button press |
| Oct 23 | Music Toggle Button | Music toggles on/off with button press | Pass | Pause the music instead of actually stopping the track and restarting it |
| Oct 23 | Lines Obstacle | Spawns in spawner | Pass |  |
| Oct 24 | Score Counter | Score still displays correctly after changes backend | Pass | Changed to using PlayerPrefs for score also |
| Oct 24 | Reset Highscore Button | Highscore is reset on button press | Pass |  |
| Oct 24 | Confirmation Box | Box appears on reset highscore button press and works as expected | Fail | Had to add this box in case of accidental button press |
| Oct 24 | Confirmation Box | Box appears on reset highscore button press and works as expected | Pass | Now confirmation box makes sure player didn’t accidentally press button |
| Oct 24 | Tap to Continue UI | UI appears on resume, and disappears on screen tap | Pass |  |
| Oct 25 | Android Build | Game runs on android device | Fail | Build won’t run |
| Oct 25 | Android Build | Game runs on android device | Pass | Failed Facebook APK still had leftover files, which caused the build to fail |
| Nov 6 | Share to Facebook | Post to Facebook works | Fail | Post isn’t working |
| Nov 6 | Share to Facebook | Post to Facebook works | Pass | Linked with Facebook app id, post works however only some parameters passed get used in post |
| Nov 6 | Screen Rotation | The screen no longer rotates to landscape | Pass |  |
| Nov 6 | Death Animation | Animation runs when player hits obstacle | Pass |  |
| Nov 14 | Highscore Counter | Counter works on main menu | Pass |  |
| Dec 5 | Tap to Jump UI | UI appears on game start and disappears on screen tap | Pass |  |
| Dec 6 | Tap to Jump UI | UI includes simple “Matching Color is Safe” instruction | Pass |  |