

Infinite Runner (2D platformer)

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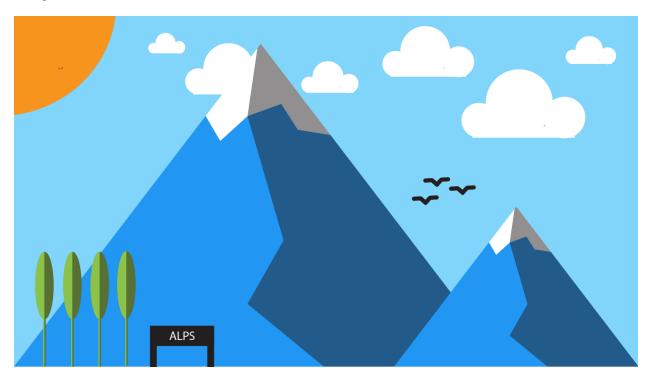
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Background summary

User will play as a small character running through different scenes to collect achievements, coins, and dodge obstacles. The levels will be defined by different environments with the ability to choose to start on previously completed levels, ordered by difficulty, or play an infinite-run mode instead. There is also a boost mechanic that build up as player collects 'fuel'; when the boost is used, the player will move much faster than the normal running speed.

Because the game environment will be scrolling across the screen at an often rapid pace, we decided to limit the number of colors and shapes to a less detailed style where individual elements can easily distinguished. This simplistic style also translates to a material design approach to the UI system with simple geometric shapes made of solid colors and soft gradients.

Style



Material Design

- Simple light solid colors
- Slightly curved corners on boxes
- Soft Gradients within individual elements

- Drop Shadow behind sections of element to differentiate from surrounding context

Primitive Geometric Shapes

- Primarily Boxes, circles, and triangles
- Ring Dial timers
- Some bolded Lines

Settings

- Volume control for Music
- Volume control for SFX
 - Control over the output sound levels so that users can customize their experience
 - Example: Playing in a quite situation but SFX telegraphs upcoming events, users can turn down the Music while still keeping SFX.
 - Example: Phone has really loud or really quiet speakers, users can adjust volume to comfortable levels
- Character Appearance
 - Able to choose from a selection of available characters that all look unique and different.
 - Purely for aesthetic purposes
 - Makes it easier for user to project themselves onto the character and immerse themselves in the game when they look like the character they're playing as.
- Level Selection
 - Users can choose from a selection of levels in order to keep the environment varied and interesting
 - Each level provides a different level of difficulty so that users are always challenged and aren't forced to play levels that are too easy or too hard

Key Features

Game Features

- Continuous running to right of screen
- Jumping to avoid running into obstacles
- Jumping to avoid falling into gaps
- Collect fuel to fill up boost meter
- Use fuel boosts to quickly advance

- Keep track of and compare to High score

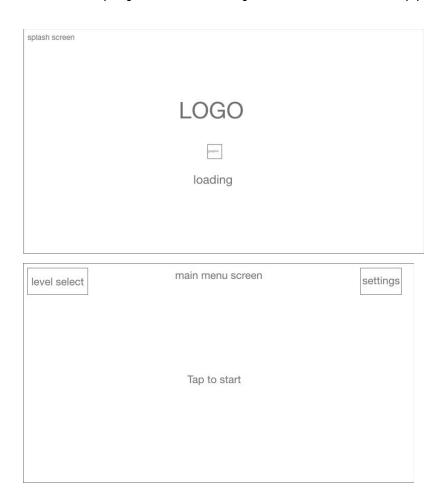
UI Features

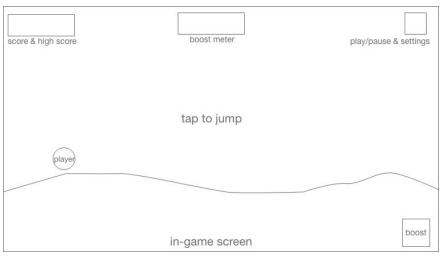
- Level selection
 - User might wish to replay certain levels, or if multiple users use the same device and want to experience all the content individually
 - Levels appear next to each other during selection so that users can visually compare the differences
- Settings control
 - Accessibility and customization of options is ethical, user friendly and inexpensive to implement
- Pause Game
 - For casual mobile games, the ability to seamlessly and quickly begin and pause play is critical
- Action to Jumping
 - Jumping is performed by tapping anywhere on-screen that isn't a button, and to demonstrate this, the player must tap the screen to start, causing the player character to jump into action
- Keep track of Boost meter
 - Must be an unobtrusive yet clearly visible display to show the player how much "fuel" they have
- Action to use Boost
 - Must have a button that clearly indicates its relation to the "fuel" meter. Might flash once fuel is maxed out to indicate "super boost" if that's an action the player can perform
- View Current Score
 - Unobstructive but clear, changes color or changes somehow to indicate the player is currently breaking their high score
- View High Score
 - If visible during gameplay, must be distinct from the current score. Leaderboard list?
 - High score appears in smaller text underneath current score

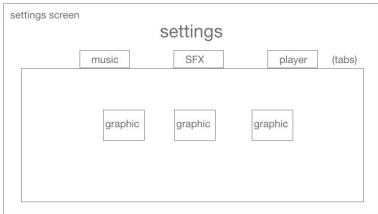
Scenario Storyboard

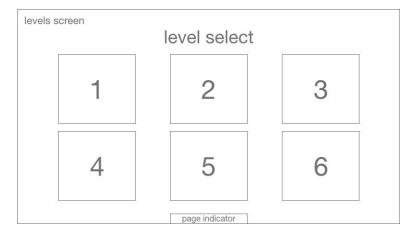
1. The app starts with a loading splash screen with the games logo and a material design loading graphic

- 2. The opening screen shows the game environment and player in the background with text prompt "tap to start". This main menu also has options to go to level select or settings.
- 3. If the player taps, the game begins. This screen is the in-game state and has settings and pause options in the upper right, a boost meter on top, and the game stats in the upper left. The user will tap the screen to jump over obstacles. In the bottom right there is the boost button which will give the player extra speed for a short amount of time.
- 4. From the main menu, if the player hits level select they will see a screen containing all the available levels, with locked ones grayed out. The user can select any level that have completed or are working on.
- 5. From the main menu, if the player hits settings, they will see a screen with 3 tabs for music, sfx, and player. The music and sfx will have material design graphics that control volume and other music settings. The player tab will let you customize the appearance of the runner.

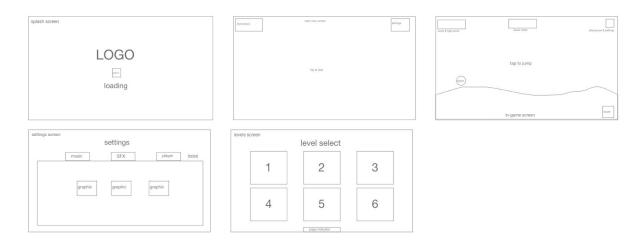




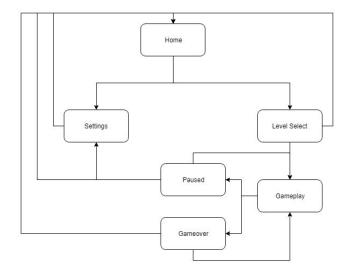




Screen Wireframes



Screens



Player goals

Start gameplay as quickly as possible

- The number of steps to enter gameplay should be minimized
 - Game Started
 - Optionally adjust settings and character appearance.
 - Select Level

- Game Start

Reset quickly as possible

- The number of steps to reset the game when you lose should be minimized
 - Game Over
 - Optionally leave game
 - Optionally adjust setting s
 - Return to game

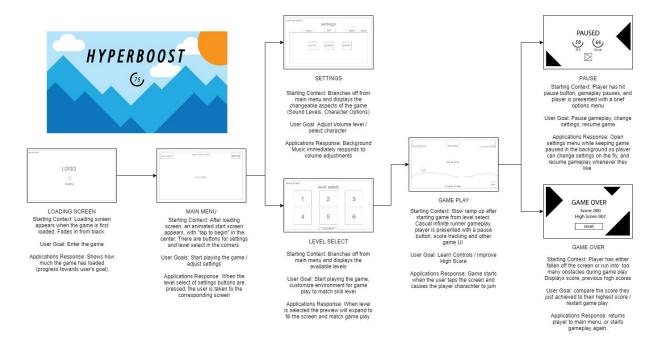
Easily Adjust settings

- setting are available to change settings from main menu and pause menu Measure progress (distance)
 - Clear indication of current score
 - Current score is displayed in the top left of screen at all times so that it can easily be referenced without looking too far away from player

Compare achievement to previous attempts

- Easy way to compare current or most recent score to highest score
- During gameplay, high score is near current, but smaller
- When Gameover screen reached the High Score is also visible and visually distinct from the score most recently achieved

Interaction Plan



Scenarios

John gets out of class early and has some time before his next class. He sits down, pulls out his phone and searches for something to play. The bright colors of the hyper boost app logo catches his eye and he opens up the app. He is greeted with a calming loading scene that quickly takes him the main menu before he gets too impatient. John doesn't have a lot of time to mess with settings so he goes into the level selection and taps on the first level. The level loads and he follows the on-screen instructions 'tap to jump' to start the game. The character starts at a slow pace so he has time to glance up at his high score; he thinks it's kind of low and wants to increase it so he can show off to his friends. His first attempt doesn't go so well and he doesn't get very far. The game over screen is quickly dismissed and he's right back to trying again, still aiming to beat his high score.

Alice is taking the subway home from work and is bored of staring out into the dark tunnels. She usually listens to music but she forgot her headphones today. She turns to her phone and opens up the game her teenage son told her to try. She wants to hear some sound so she looks around as sees that the only people in her train car are on the other side; She goes into the settings and turns the SFX and music to 10 so that only she can hear it. She selects the brown haired female character to play as and the proceeds to the level selection. She doesn't know what to pick but opts for a smooth looking desert scene. She's getting into the rhythm of the game when the train comes to a stop and people start flooding on. She quickly pauses and turns the volume down to 0. She keeps playing and quits out of the game through the pause menu once she approaches her stop.

Moodboard



Allerta Stencil Regular















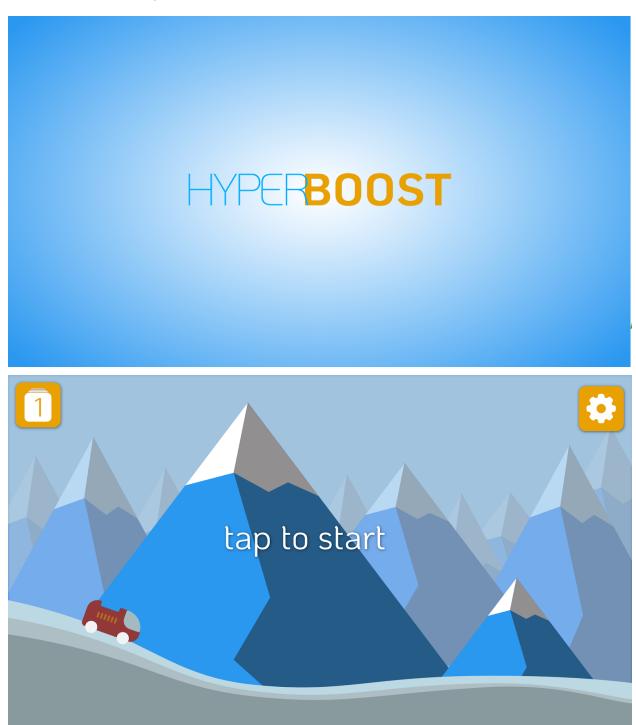


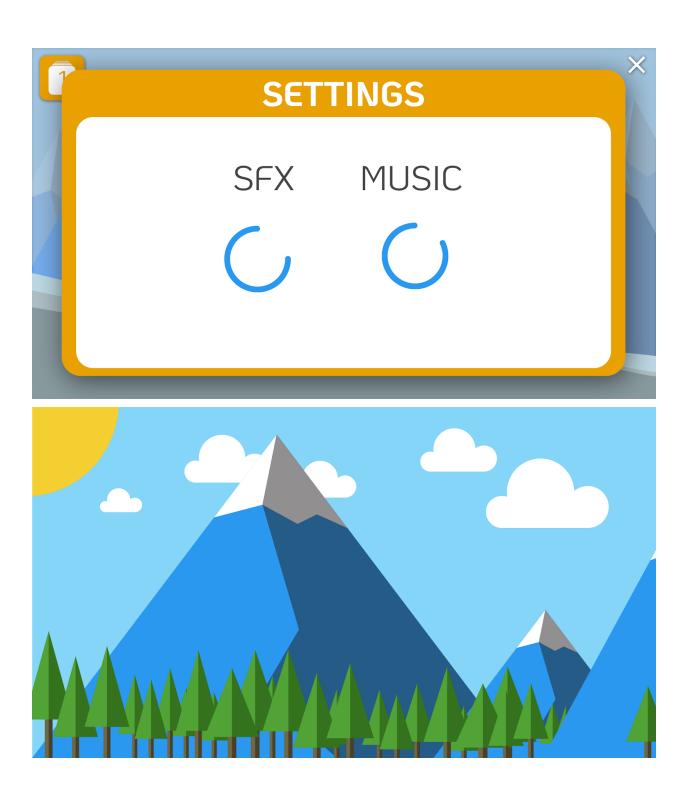






Initial Comps





Test Report

Question(s) that are being addressed

1. First impressions of the Main Menu?

- 2. What is the expected gameplay just from looking at the menu?
- 3. Why are the settings being adjusted?
- 4. What is adjusted/changed in the settings menu?
- 5. Do users understand how to play the game?
- 6. what action is taken when the gameplay begins?
- 7. How long does it take to reach the gameplay state?
- 8. Do users understand the purpose of each game state?
- 9. Are there any unnecessary steps or adjustments
- 10. Likelihood of playing the game again
- 11. How long to reset the game

Comments and Suggestions

More color variation in the slider

Main menu on splash screen

Level section icon is ambiguous

Unclear if settings and level selection menu pause game

Represent volume as bars

Artwork on splash screen

Possible Expectation of competitive racing game

Buttons are too small for a mobile context

Change name of game to fit style better

Color transitions look real good

Text drop-shadow on mountains looks weird, distrating

Radial volume slides obfuscate usage, people expect a linear volume bar.

Font size was inconsistent between "music" and "sfx" labels

Level select numbers difficult to make out against the image they overlay

Summarize what you learned (i.e. new information)

From the in-class testing session we learned that the name and visual style we had chosen don't fit very well together. HyperBoost sounds like a fast paced competitive racing game while our game's smooth curves and solid colors make it look like a calming solo experience.

In addition, we had some conflicting opinions about the volume controls. Some liked the radial dial, while others found it confusing and unintuitive, suggesting a bar might be better, and align with expectations that other programs with volume control put forward.

The drop shadow effect on the centered "tap to begin" text on the start screen was visually distracting for many people. Since there were mountains at different depths behind the text, the shadow was projected at different distances, which was likely

intended to give it the illusion of occupying a "real" world space, but ended up being distracting.

The text labels on some elements, specifically the volume control dials, were at different font sizes, and this inconsistency was distracting to some people.

We also received feedback on our setting and level select buttons. It was pointed out that in a mobile context they might be too small to consistently and accurately press on. The icon for the level selection menu also seem vague in function upon first glance. Once the level selection button was clicked, users could understood the purpose, but the initial icon didn't match up very well.

Although users were able to understand the function of the level selection menu, few noticed the numbering used to label the levels. This was due to the fact that the overlay was difficult to visually differentiate from the background image.

Some people had an issue with our lack of a "main menu" which the player would be introduced to first and returned to as a "hub". Others thought that the lack of a main menu fit the game well, as it removed steps a player needed to take in order to get to the gameplay.

How you plan to apply the new information to your work

Rather than doing a complete redesign and changing our visual style, we plan on formulating a name for this game based on the visuals and how the game feels.

The drop shadow effect on the centered "tap to begin" text will likely be removed and replaced with a different way to make the text appear more readable on the background.

With regard to the volume controls, because of the mixed feedback we will be trying different iterations of the current design, with the goal of improving readability and ease-of-use. Additionally, we will make sure all text that accompanies similar elements has the same style.

In addition to increasing the size of both buttons, we will also change the icon of the level selection button to make it more clear. We plan on achieving this with an icon that looks like either stacked index cards or a grid of some kind, resembling the actual level selection menu.

Rather than using a light transparent overlay for the level selection menu, we plan on either making the overlay darker or removing the overlay all together and using a solid color number. Either way, making the number contrast more should lead to greater readability and understanding.

Since some people wanted a main menu, and others appreciated our more streamlined and minimalist approach which didn't include one, we will be revisiting this design decision and consider some ways to allow both a "hub" screen the player can go back to as well as streamline the process by which a player must go to in order to get from app launch to gameplay.

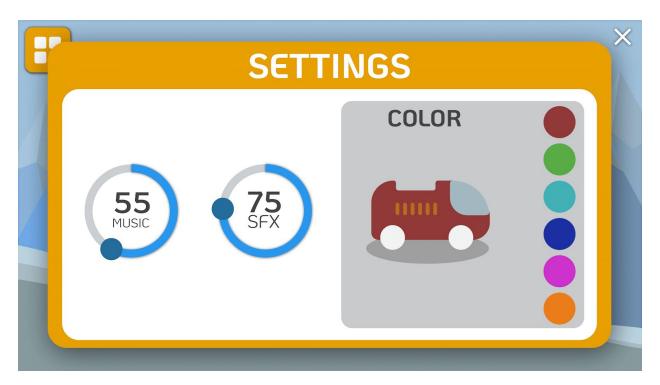
Refined Designs



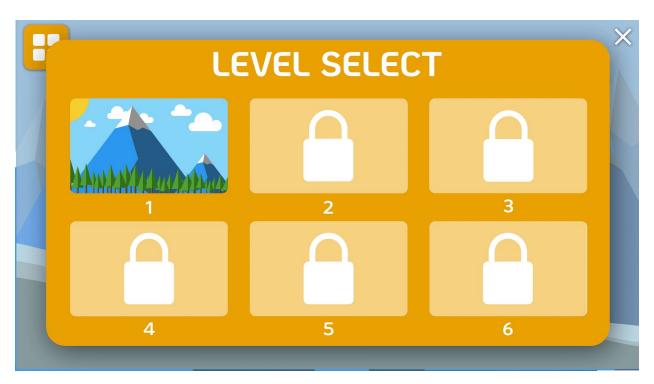
Loading Screen



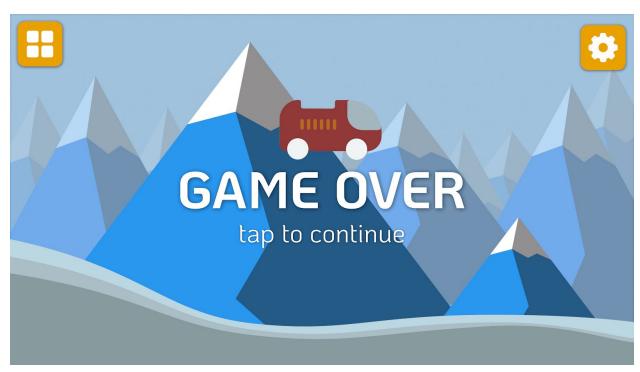
Main start screen with gameplay, settings, and level access



Settings screen



Level select screen



Game over screen

Game inspirations

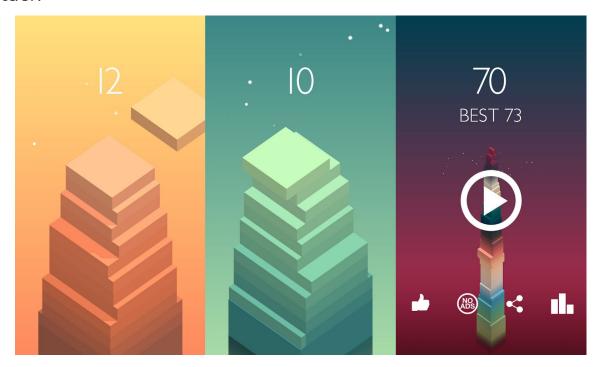
Rooftop Runner



Bit Trip Runner



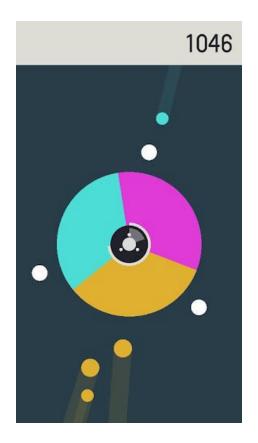
Stack



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