

P05

2025-06-06

TARGET SHIP DATE: 2025-06-06

Design Doc VF

Roguelike Oregon Trail: Devo Trail

Overview

- Will be fully customizable to suit the user's interests.
- Implement parallax effect (multi-layered images to create sense of moving) when travelling
- Game cycle will be a lot shorter than the original (~20 min), enforce repeating playthroughs with some permanent progression.
- Player profile detailing stats

APIs

- N/A

Program Component Connections

- Home Page: Introduction, start game, and navigation hub
- Profile Page: Displays player statistics and potential leaderboard rankings
- Play Page: Main game view with real-time progress along a visual route
 - Parallax background (Parallax is used to simulate 3D environments in 2D spaces by layering backgrounds. Each layer scrolls at different speeds to give the illusion of depth as the character or camera moves.)
 - Choice box for player actions
- Builder Page: Customize characters, choices, and upload backgrounds. Option to reset to default.
- Login/Register Page: Create or enter your account information
- CSS: Makes everything look super pretty :)
- JavaScript: Incorporates smoother functionality and flowing elements for awesome UX

Database Organization(SQL)

- Database connects user profiles and progression across all pages
- Builder Page updates some customization data in the database
- Play page advances by user choice which affects data storage

Users

username	TEXT
password	TEXT
highScore	INTEGER DEFAULT 0
pfp	TEXT
userID	INTEGER PRIMARY KEY AUTOINCREMENT
backgroundImagePath	TEXT
midgroundImageOnePath	TEXT
midgroundImageTwoPath	TEXT
wagonImagePath	TEXT

Games

gameID	INTEGER PRIMARY KEY AUTOINCREMENT
userID	INTEGER
gameName	TEXT
gameData	TEXT
FOREIGN KEY	(userID) REFERENCES users(userID)

Stats

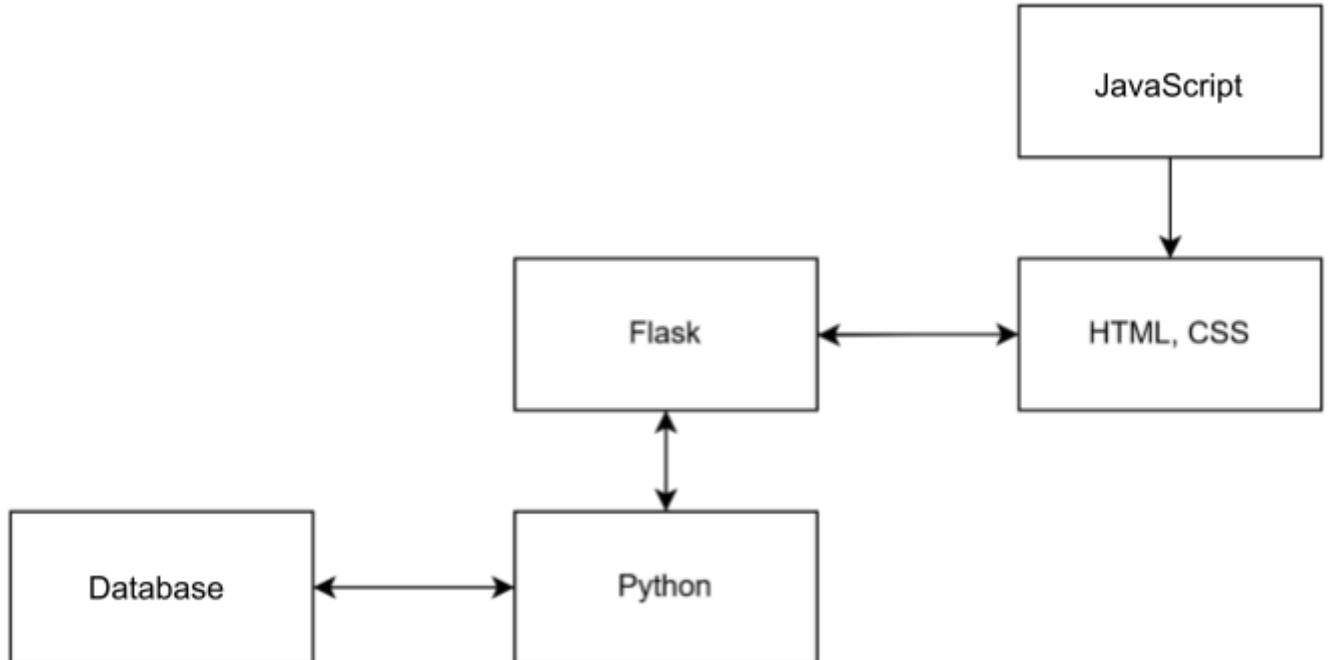
distanceTraveled	INTEGER DEFAULT 0
daysPassed	INTEGER DEFAULT 0
survivingPeople	INTEGER DEFAULT 5

foodQuantity	INTEGER DEFAULT 100
money	INTEGER DEFAULT 700
oxen	INTEGER DEFAULT 2
bullets	INTEGER DEFAULT 50
mileage	INTEGER DEFAULT 0
event_counter	INTEGER DEFAULT 0
injury	BOOLEAN DEFAULT 0
illness	BOOLEAN DEFAULT 0
blizzard	BOOLEAN DEFAULT 0
fort_flag	BOOLEAN DEFAULT 0
south_pass_flag	BOOLEAN DEFAULT 0
userID	INTEGER
FOREIGN KEY	REFERENCES users(userID)

API Output Map/SQL Database

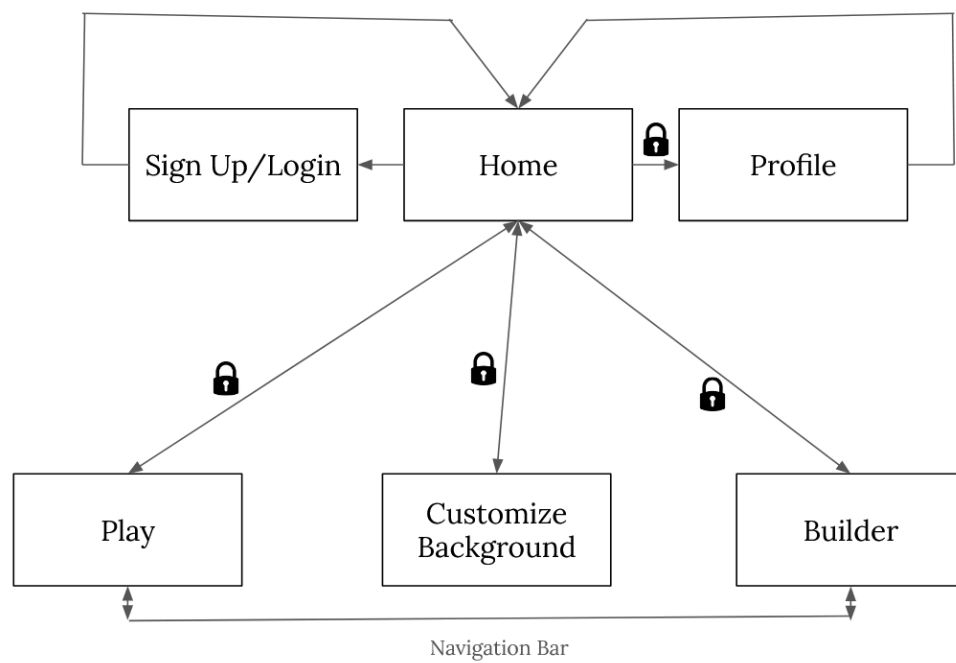
- User Profiles Table: Username, stats, past runs, custom settings
- Event Log Table: Actions taken per game, outcomes
- Assets Table: User-uploaded images, selected backgrounds
- Game Data Table: People, Supplies, Food (Things so game can operate)

Component Map



Site Map

🔒 Required to be logged in
(Redirects you to "Sign Up/Login" otherwise)



Home Page:

- Sign In, Start Game, Load Profile, Builder.
- Minimalistic UI with quick navigation.

Profile Page:

- View player statistics (games played, wins, losses).
- Logout to access different account

Play Page:

- Displays current location, past checkpoints, and upcoming destinations.
- Animated parallax effect during travel that can be customized in page. Also wagon image can be changed
- Dynamic event panel with player choices.
- Options to make decisions, manage resources.

Builder Page:

- Character customization: Name, appearance, background.
- Choice customization: Modify obstacles, dates, distance
- Reset and Save for you

Task Breakdown

Abidur:

- CSS (Tailwind), HTML

Christopher:

- HTML, Login/Logout, Flask/Python

Ivan: PM

- Flask/Python, Game code, Database

Jackie:

- Javascript

Front-end Framework

Framework: Tailwind CSS for styling and responsiveness.

JavaScript: For dynamic content and interactive elements.

HTML: Structuring the UI components.

Sample Movement GIF: (we know you can't see it move lol)

