**truffle-hunter-tycoon/**

**├── index.html # Main HTML entry point**

**├── package.json # Dependencies and scripts**

**├── README.md # Project documentation**

**├──**

**├── css/ # All CSS files**

**│ ├── main.css # Main stylesheet and CSS variables**

**│ ├── components/ # Component-specific styles**

**│ │ ├── pig.css # Pig character styling**

**│ │ ├── forest.css # Forest background and environments**

**│ │ ├── truffle.css # Truffle animations and effects**

**│ │ ├── ui-panel.css # General UI panel styling**

**│ │ ├── academy.css # Pig Academy interface**

**│ │ ├── professor-hall.css # Retired pigs display**

**│ │ ├── achievements.css # Achievement notifications**

**│ │ ├── location-selector.css # Location switching UI**

**│ │ └── tutorial.css # Tutorial overlay styling**

**│ ├── layouts/ # Layout-specific styles**

**│ │ ├── game-layout.css # Main game screen layout**

**│ │ ├── mobile.css # Mobile responsive styles**

**│ │ └── desktop.css # Desktop-specific styles**

**│ └── animations/ # Animation-specific CSS**

**│ ├── transitions.css # Page transitions**

**│ ├── particle-effects.css # CSS particle effects**

**│ └── ui-animations.css # Button hovers, etc.**

**│**

**├── src/ # Source code**

**│ ├── main.js # Application entry point**

**│ ├── config/ # Configuration files**

**│ │ ├── GameConfig.js # Game balance numbers**

**│ │ ├── TruffleData.js # Truffle types and values**

**│ │ ├── LocationData.js # Location configurations**

**│ │ └── AchievementData.js # Achievement definitions**

**│ │**

**│ ├── models/ # Data models (game entities)**

**│ │ ├── Game.js # Main game state manager**

**│ │ ├── Pig.js # Pig entity with stats**

**│ │ ├── Truffle.js # Truffle entity**

**│ │ ├── Location.js # Location entity**

**│ │ ├── Achievement.js # Achievement entity**

**│ │ ├── ProfessorPig.js # Retired pig entity**

**│ │ └── SaveData.js # Save/load functionality**

**│ │**

**│ ├── controllers/ # Game logic controllers**

**│ │ ├── GameController.js # Main game loop and coordination**

**│ │ ├── PigController.js # Pig behavior and actions**

**│ │ ├── TruffleController.js # Truffle spawning and collection**

**│ │ ├── LocationController.js # Location management**

**│ │ ├── UpgradeController.js # Upgrade system logic**

**│ │ ├── AchievementController.js # Achievement tracking**

**│ │ └── InputController.js # User input handling**

**│ │**

**│ ├── views/ # UI components and rendering**

**│ │ ├── GameView.js # Main game screen coordinator**

**│ │ ├── components/ # Reusable UI components**

**│ │ │ ├── PigRenderer.js # Pig visual representation**

**│ │ │ ├── ForestRenderer.js # Forest background renderer**

**│ │ │ ├── TruffleRenderer.js # Truffle animations**

**│ │ │ ├── UIPanel.js # Base UI panel component**

**│ │ │ ├── ResourceDisplay.js # Gold/reputation display**

**│ │ │ ├── ProgressBar.js # Generic progress bar**

**│ │ │ ├── Button.js # Styled button component**

**│ │ │ ├── Modal.js # Modal dialog component**

**│ │ │ └── Notification.js # Toast notifications**

**│ │ │**

**│ │ ├── screens/ # Full screen components**

**│ │ │ ├── MainGameScreen.js # Primary gameplay screen**

**│ │ │ ├── PigAcademyScreen.js # Upgrade/retirement screen**

**│ │ │ ├── ProfessorHallScreen.js # Retired pigs display**

**│ │ │ ├── AchievementsScreen.js # Achievements list**

**│ │ │ ├── TutorialScreen.js # Tutorial overlay**

**│ │ │ └── VictoryScreen.js # Win condition screen**

**│ │ │**

**│ │ └── ui/ # UI-specific utilities**

**│ │ ├── UIManager.js # Screen switching logic**

**│ │ ├── AnimationManager.js # GreenSock animation controller**

**│ │ ├── SoundManager.js # Audio handling**

**│ │ └── EffectsManager.js # Particle effects**

**│ │**

**│ ├── utils/ # Utility functions**

**│ │ ├── MathUtils.js # Mathematical calculations**

**│ │ ├── RandomUtils.js # Random number generation**

**│ │ ├── FormatUtils.js # Number formatting (1K, 1M, etc.)**

**│ │ ├── TimeUtils.js # Time-related utilities**

**│ │ ├── StorageUtils.js # LocalStorage wrapper**

**│ │ └── EventEmitter.js # Custom event system**

**│ │**

**│ └── constants/ # Game constants**

**│ ├── GameStates.js # Game state enums**

**│ ├── EventTypes.js # Event name constants**

**│ ├── UIConstants.js # UI-related constants**

**│ └── AssetPaths.js # Asset file paths**

**│**

**├── assets/ # Game assets**

**│ ├── images/ # Image files**

**│ │ ├── pigs/ # Pig sprites and animations**

**│ │ │ ├── pig-idle.png**

**│ │ │ ├── pig-walking.png**

**│ │ │ ├── pig-digging.png**

**│ │ │ └── pig-colors/ # Different pig color variations**

**│ │ ├── truffles/ # Truffle images**

**│ │ │ ├── button-mushroom.png**

**│ │ │ ├── summer-truffle.png**

**│ │ │ ├── black-truffle.png**

**│ │ │ ├── white-truffle.png**

**│ │ │ ├── diamond-truffle.png**

**│ │ │ ├── golden-truffle.png**

**│ │ │ └── poo-truffle.png**

**│ │ ├── backgrounds/ # Location backgrounds**

**│ │ │ ├── beginner-forest.png**

**│ │ │ ├── oak-grove.png**

**│ │ │ ├── ancient-woods.png**

**│ │ │ └── mystic-glade.png**

**│ │ ├── ui/ # UI elements**

**│ │ │ ├── buttons/**

**│ │ │ ├── panels/**

**│ │ │ ├── icons/**

**│ │ │ └── effects/**

**│ │ └── particles/ # Particle effect images**

**│ │**

**│ ├── sounds/ # Audio files**

**│ │ ├── sfx/ # Sound effects**

**│ │ │ ├── pig-snort.mp3**

**│ │ │ ├── coins-clink.mp3**

**│ │ │ ├── truffle-found.mp3**

**│ │ │ ├── rare-truffle.mp3**

**│ │ │ ├── level-up.mp3**

**│ │ │ └── achievement.mp3**

**│ │ └── music/ # Background music**

**│ │ ├── forest-ambient.mp3**

**│ │ └── victory-theme.mp3**

**│ │**

**│ └── fonts/ # Custom fonts**

**│ └── game-font.woff2**

**│**

**├── lib/ # External libraries**

**│ ├── gsap.min.js # GreenSock Animation Platform**

**│ └── custom-components/ # Reusable game components**

**│ ├── NumberCounter.js # Animated number counting**

**│ ├── ParticleSystem.js # Particle effect system**

**│ └── ScrollingBackground.js # Parallax scrolling**

**│**

**└── dist/ # Build output (generated)**

**├── bundle.js**

**├── styles.css**

**└── assets/**

**=== Key Architecture Decisions ===**

**1. \*\*Separation of Concerns\*\*:**

**- Models: Pure data and business logic**

**- Views: Rendering and UI components**

**- Controllers: Coordinate between models and views**

**2. \*\*CSS Organization\*\*:**

**- Component-based CSS files match JS components**

**- Shared variables in main.css**

**- Responsive design through layout files**

**3. \*\*Asset Management\*\*:**

**- Organized by type and usage**

**- Clear naming conventions**

**- Optimized for web delivery**

**4. \*\*Modular Design\*\*:**

**- Each class in its own file**

**- Clear dependencies and imports**

**- Easy to test and maintain**

**5. \*\*Rapid Development Focus\*\*:**

**- Reusable UI components**

**- Prebuilt utility functions**

**- GreenSock integration for smooth animations**

**- Configuration-driven game balance**