

## Week 1: Setting the Foundation

- **Alex:**
  - Begin working on **basic level design** and creating **environmental layouts** (platforms, blocks, basic terrain).
  - Develop basic **player movement and collisions** (Red's walking, jumping, and basic physics).
  - Implement the **main character's walking stick** attack as part of Red's animation and combat system (basic attacks and animations).
  - Create the **player's starting area** with simple obstacles to get the player moving and interacting.
- **Todd:**
  - Begin building the **NPCs**, focusing on **dialogue triggers** and ensuring basic **aggression/activation** system (NPCs waiting for player interaction).
  - Implement basic **NPC interaction** (initiate conversation or attack).
  - Set up **location variables** for NPCs to track their movement.
- **Liz:**
  - Create the **UI** for the **health bar** and **inventory system**.
  - Design and implement the **main menu** (new game, load game).
  - Begin the **pause/help menu**, focusing on save functionality and basic settings (mute, difficulty options).
  - Add initial **inventory items** (Owl's Wing, Can of Tuna, etc.) with basic interactions (immediate use or store).
- **Shan:**
  - Focus on **collectibles** placement across levels (ensure Owl's Wing and Can of Tuna automatically go into inventory, and others allow use or storage).
  - Implement logic for **health and sanity power-ups** and the effect they have on the player (increased health, sanity, or damage).
  - Begin working on how **Poison Apple** damages the player on contact.
- **Hengyi:**
  - Work on **background design** for the main menu and the first level.
  - Set up **basic sound effects** for player movement, walking stick attack, and background music for the first level.
  - Start developing dynamic **background changes** that respond to game events (like health and sanity changes).
- **Mark:**
  - Begin working on the **character customization screen** (basic design, allowing players to modify Red's appearance).
  - Track **player stats** and ensure they are affected by combat and interactions with items.
- **Bidhan:**
  - Work on the **save points** system, enabling players to **save their progress** at specific locations (checkpoint saves).

- Implement **respawn mechanics** to bring players back to the last save point after death.
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## Week 2: Enhancing Mechanics and First Level Development

- **Alex:**
    - Continue developing **level designs** for the first area.
    - Begin working on **obstacles/challenges** (platforming puzzles, environmental hazards).
    - Implement **collisions and boundaries** for the first level's platforms and walls.
  - **Todd:**
    - Set up a system for NPCs to **move** to specific locations on the map and **interact** with the player.
    - Ensure that NPCs have **progression triggers** for conversation based on location or player actions.
    - Implement **health and damage mechanics** for NPCs (allow them to deal damage to the player).
  - **Liz:**
    - Finalize **health and inventory system**; ensure items can be stored or used immediately.
    - Add **interaction prompts** for inventory items (Golden Apple, BerserkerBoost, etc.).
    - Develop basic functionality for **pause menu** (save, quit, and settings).
  - **Shan:**
    - Place **additional power-ups** (Golden Apple, Red Slippers, etc.) and ensure the player can **choose to use** or store them.
    - Continue work on **sanity system** (ensure killing enemies lowers sanity and the sky turns green as a warning).
    - Implement **Poison Apple** logic, ensuring it damages the player on contact.
  - **Hengyi:**
    - Create **backgrounds** for the second level and implement **dynamic background changes** based on game events (e.g., health drop, sanity loss).
    - Continue developing **sound effects** for new interactions (like NPCs reacting to being hit or dialogue opening).
  - **Mark:**
    - Continue **character customization** work and implement **stats tracking** that reflects combat and power-up use.
  - **Bidhan:**
    - Finalize **save points** and **respawn mechanics**, ensuring progress is saved in a consistent manner across levels.
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## Week 3: NPC Interaction and First Combat

- **Alex:**
  - Implement **basic combat mechanics** using Red's walking stick (attack damage, enemy hit detection).
  - Continue developing **platforming mechanics** (jumping, sliding, or climbing if required).
  - Finalize **basic collision detection** for level design and character movement.
- **Todd:**
  - Work on **advanced NPC behavior**: NPCs should react to the player's attacks, either by engaging in combat or fleeing.
  - Begin implementing **conversations** that trigger story progression and affect NPC aggression.
- **Liz:**
  - Finalize **inventory UI** to display both **health** and **inventory items** clearly.
  - Implement **interactive inventory menu** where the player can choose whether to use a power-up immediately or store it for later.
  - Refine the **pause menu** to fully allow **game saving**, **settings adjustments**, and **inventory access**.
  - Implement **dialogue box UI** to display NPC conversations when the player interacts with them.
- **Shan:**
  - Test and refine **collectibles interaction** to ensure that items like the **Golden Apple**, **BerserkerBoost**, and **Red Slippers** work as intended (either used immediately or stored).
  - Implement the **health and sanity system** in full, ensuring that collectibles have a clear impact (such as restoring health or increasing sanity).
  - Test the **Poison Apple** to ensure it damages the player and affects health as expected.
- **Hengyi:**
  - Continue working on **background design** to reflect changes in the environment based on **player health** and **sanity**.
  - Add **ambient sounds** that reflect different states (such as tension-building music when the player is near enemies or after killing an NPC).
  - Integrate **dynamic background transitions** that match the game's events (for example, changing when the player becomes overwhelmed by enemies or begins to lose sanity).
- **Mark:**
  - Continue working on the **character customization screen**, focusing on making adjustments to Red's stats as part of the customization process.
  - Finalize **stats tracking** for health, sanity, and items, ensuring they are properly stored and updated as the player progresses through the game.
- **Bidhan:**

- Refine **save point mechanics**, ensuring **multiple saves** can exist in a single session, and players can return to specific points without losing too much progress.
  - Add **checkpoint saves** to areas near major NPC interactions or after key story events.
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## Week 4: Expanding NPC & Combat Systems

- **Alex:**
  - Begin working on additional **levels** that include more complex **environments** and **obstacles** for players to navigate (e.g., moving platforms, enemy traps).
  - Introduce more complex **combat interactions**, such as combos or special attacks using the walking stick or additional weapons (once Liz's inventory system is fully implemented).
  - Test and polish **collision detection** to prevent issues with object interactions or player movement.
- **Todd:**
  - Continue refining **NPC AI** so that NPCs can interact with the player in a more dynamic manner (they should change behavior based on prior interactions).
  - Implement **more NPC types** with varying aggression levels and conversation progressions (e.g., helpful NPCs versus hostile ones).
  - Work on **branching dialogue options** that influence NPC behavior (whether they attack, talk, or help the player).
- **Liz:**
  - Finalize **inventory UI**, ensuring that players can interact with their **health and item inventory** during combat and exploration seamlessly.
  - Polish **pause and settings menus** to ensure smooth transitions and responsive controls.
  - Implement **game progression logic** to unlock items or new abilities as players progress (for example, unlocking the ability to use certain collectibles or upgrade existing items).
- **Shan:**
  - Test **health and sanity** mechanics more extensively in levels with large enemy encounters to ensure the system works smoothly.
  - Work on implementing **in-game notifications** for when the player picks up a power-up or item, ensuring they know whether an item was automatically added to their inventory or used immediately.
  - Implement **Tornado Game Over** logic, ensuring that if the player kills more than five enemies and reaches the sanity threshold, the tornado effect triggers and ends the game.
- **Hengyi:**

- Create more dynamic **background sounds** that reflect changing environmental states or combat situations (e.g., increasing tension when an NPC becomes hostile).
  - Begin work on **unique music** or sound cues for specific **events** in the game, such as encountering a Red Herring or discovering critical items.
  - **Mark:**
    - Begin working on **tracking the player's relationship** with NPCs (friend/foe), based on prior interactions.
    - Implement **character progression** that allows the player to gain new abilities or unlock passive upgrades as the game progresses.
  - **Bidhan:**
    - Begin testing the **save system** with more complex scenarios, ensuring that **player choices** (such as attacking or sparing NPCs) influence the save data and game progression.
    - Polish **respawn mechanics** to ensure the player's return to the world feels seamless and does not disrupt pacing.
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## Week 5: Advanced Combat, NPC Systems, and Level Refinement

- **Alex:**
  - Polish **combat interactions**: Test and refine Red's walking stick attacks and interactions with NPCs (damage, knockback, etc.).
  - Finalize **level designs** for the remaining worlds, ensuring they provide a **smooth transition** in difficulty and complexity.
  - Implement **environmental hazards** like traps, moving platforms, or other obstacles to challenge players.
- **Todd:**
  - Implement **aggression system** for NPCs that includes different **attack patterns** based on their type (e.g., faster or stronger enemies, NPCs that have ranged attacks).
  - Ensure that **conversation trees** are properly integrated and affect the player's relationship with NPCs (hostile NPCs become aggressive, friendly NPCs give helpful information).
- **Liz:**
  - Continue working on the **inventory system**, ensuring it can support **multiple items** (use, store, discard) and reflects real-time changes in the UI.
  - Refine **pause menu** functionality and **game save/load** features, making sure these systems work seamlessly across different scenarios.
- **Shan:**
  - Refine **collectibles system** to ensure **power-ups** are clearly presented to the player and that their use or storage is intuitive.

- Test **sanity and health** mechanics extensively, ensuring that the **Tornado Game Over** triggers correctly after five kills or more.
  - **Hengyi:**
    - Continue work on **background dynamic shifts** based on player actions (e.g., an eerie atmosphere building as the player kills more enemies).
    - Add additional **sound effects** for new actions (NPCs attacking, unique NPC deaths, or critical dialogue moments).
  - **Mark:**
    - Finalize **character customization** and **stats tracking**.
    - Ensure the **progression system** tracks the player's combat ability and how NPC interactions influence future outcomes (e.g., sparing or killing NPCs).
  - **Bidhan:**
    - Continue testing the **save and respawn systems** in complex scenarios to ensure players can safely return to the game with all progress intact.
    - Ensure **game choices** are saved and affect later events (like NPC attitude changes, story progression).
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## Week 6: Polishing and Final Testing

- **Alex:**
  - Finalize **level design** for the final few areas, ensuring they align with overall game difficulty progression.
  - Conduct extensive **playtesting** on the overall game mechanics, including combat, NPC interactions, and movement.
- **Todd:**
  - Ensure **NPC interactions** are fully functional, including complex dialogues and varied behavior patterns based on player choices.
  - Finalize **enemy combat AI** and adjust for difficulty levels.
- **Liz:**
  - Finalize **UI design** for both health and inventory systems, ensuring clarity and usability.
  - Test all menu functionalities (pause, save, load) and make sure transitions are smooth.
- **Shan:**
  - Conduct **final playtesting** of **collectibles** and **power-up systems**, ensuring items are distributed in levels properly and interact with the player as expected.
  - Test **health and sanity loss** mechanics in various environments.
- **Hengyi:**
  - Conduct final **sound design adjustments** to ensure all levels have appropriate background music and sound effects.
  - Ensure that dynamic background and sound transitions work smoothly.
- **Mark:**

- Conduct final testing on **character progression** systems and ensure that stats are updated correctly with each interaction.
- Test **customization options** and verify they affect gameplay.
- **Bidhan:**
  - Conduct final tests on **save/load** mechanics, ensuring all progress, player choices, and settings persist correctly.
  - Finalize **respawn system** and test it in real scenarios (after player death and subsequent progression).