# ELEMENTAL PLANETS

MMI505 PROJECT PHASE - 2

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# THE IDEA

- Elemental Planets is an RPG where players control Dr. Bumi Wan, a scientist and earth-bender, on a journey across four unique elemental planets.
- Elemental Planets features a core loop of exploration, combat, and puzzle-solving. Procedurally generated levels ensure replayability, while adaptive AI adjusts difficulty to maintain player engagement

# NARRATION

- The game will follow a linear story progression, with narrative design elements such as NPC interactions and environmental storytelling.
- The game will use a story completion journal so that players can go back and check the story for details.
- Each planet will reveal a part of Dr. Bumi Wan's journey to restore balance.

# STORYTELLING

- The storyline is delivered through dialogues with NPCs, journals, and clues hidden in the environment.
- Each planet will reveal a fragment of the overarching mystery, culminating in a final confrontation to restore balance.
- Worldbuilding is going to enrich the player's experience through lore-rich environments and NPCs. Narrative pacing ensures key story beats are revealed at pivotal gameplay moments.

# GAMEPLAY PROPERTIES

**1.Difficulty Adjustments**

- **Dynamic Difficulty Adjustment (DDA)**:
  - The game's difficulty will dynamically adjusts based on the player’s performance. For example:
    - Enemy AI becomes more aggressive if the player consistently defeats them easily.
    - Puzzles can offer hints after repeated failed attempts.
- **Skill Cooldowns**:
  - Players cannot spam skills due to cooldown timers, which introduce strategic decision-making during combat.
- **Environmental Hazards**:
  - Each planet introduces new challenges, such as low visibility on the Water planet or constant damage zones on the Fire planet.

# GAMEPLAY PROPERTIES

**2. Player Actions**

- **Elemental Skills**:
  - **ThrowRock**: A ranged attack with knockback capabilities. Useful for keeping enemies at a distance.
  - **EarthBend**: A powerful skill that damages enemies in an area and can deform the terrain.
- **Exploration**:
  - Players explore procedurally generated environments, searching for collectibles, solving puzzles, and finding clues to progress the story.
- **Quest Completion**:
  - Interact with NPCs to accept and complete quests, including defeating enemies and collecting items.
- **Inventory Management**:
  - Players manage resources and items collected during exploration to aid in progression.

# GAMEPLAY PROPERTIES

**3. Challenges**

- **Combat Challenges**:
  - Players face adaptive AI enemies that change their behavior based on the player's skills and strategies.
  - Enemies may attack in groups, requiring players to use their skills tactically.
- **Environmental Challenges**:
  - Procedural generation introduces random hazards like falling rocks or unstable terrain.
  - Unique elemental environments (e.g., rocks in Earth, rivers in Water) force players to adapt.
- **Timed Objectives**:
  - Some quests will have time-based elements, adding pressure to complete tasks efficiently.
- **Strategic Skill Use**:
  - Limited cooldowns require players to prioritize which skill to use in critical moments.
- **Puzzles**:
  - Elemental puzzles involve manipulating the environment (e.g., moving rocks, redirecting water flows).

# LEVEL DESIGN

- Each planet has distinct environmental mechanics: low gravity on the Air planet, water currents on the Water planet, and fiery hazards on the Fire planet.
- Quest difficulties will linearly increase but will have some decreases to keep the player engaged.
- Procedural generation will ensure unique layouts while maintaining thematic consistency. Levels are designed to match player progression, gradually introducing more complex challenges.

# USER INTERFACE DESIGN

- The UI will feature a clean layout showcasing skill cooldowns, health, and quest progress.
- Tooltips will provide skill descriptions, ensuring players understand their abilities intuitively.
- Accessibility ensures intuitive use for all players.

# BALANCING

- Dynamic difficulty adjustment will ensure fairness in combat, while skill balancing prevents overpowered mechanics and dominant strategies.
- Challenge vs. reward design will maintain player satisfaction with constant addition of rewarding quests.

# RULES

- Players must defeat enemies, collect items, and solve puzzles to progress.
- Failing to complete objectives or losing all health results in restarting from a checkpoint.
- The win condition involves defeating all enemies and completing objectives on each planet.
- Gameplay constraints like skill cooldowns and health limits ensure strategic play.

# STAGES

**Concept stage**

- Storytelling and narrative is decided
- Main level design layout is decided.
- Main characters are designed
- Core mechanics are designed

# STAGES

**Eleboration stage**

- Enemy AI is developed.
- Main character skills are developed, more will be added.
- Basic UI is designed, will be improved.
- Different planet levels are being developed.
- Narrative will be added to the game through NPCs
- Items will be added

# STAGES

**Tuning stage**

- Player model will be changed and improved.
- Enemy models will be changed and vary.
- Skill effects will be added.

# CHALLENGES

- Adaptive Combat: Players face enemies with adaptive AI, requiring them to adjust strategies as enemies grow smarter and more aggressive with each encounter.
- Skill Management: Limited cooldowns for elemental skills force players to make strategic decisions about when and how to use their abilities during combat.
- Environmental Hazards: Each planet will introduce unique environmental challenges, such as unstable terrain, whirlpools, or constant damage zones, testing players' adaptability.
- Puzzle Complexity: Elemental puzzles will require players to manipulate the environment creatively, combining bending abilities to solve complex challenges.
- Resource Scarcity: Players will have to manage health, quest items, and environmental interactions efficiently to progress, especially in puzzle quests.

# DEMO VIDEO

- https://www.youtube.com/watch?v=KYOQn4VL2xU