Game Design

Items Prison Break

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1. **Objective**

   Assume you are in a prison guarded by many different mechanisms and polices when you awake. The only target is to get you out of here. You can collect different goods and tools in different gates and you must use these goods and tools to help you open the gates without attracting polices' attentions.

2. **Gameplay Mechanics**

   The game uses normal platformer physics. A player can only use tools or goods they collect before to throw to different mechanisms to open the gate in each level. The world contains player, polices, platforms (different prison scenes), different door opening mechanisms and tools (e.g. money, iron pod, stone, knife, toothbrush). After finishing one level, the player may be able to get a tool which can be very useful in later levels.

3. **Level Design**

   The levels in the game would be based on the combination of one or more situations below:

   - The player is in a capacious room and gate is far from the range the player can reach.
   - The gate is in front of the player but the mechanism to open the gate is far from the range the player can reach because of blocking by the gate.
   - Polices are patrolling and the escaping player may be found by them.

   Levels may introduce new mechanics or test the player recall of old mechanics to pass.

   The mechanisms and policies can be moving while the player is trying to pass the level, but the player would be in a fix spot and only use dragging to control the strength and direction of the item throwing. Considering each level needs to separate the player and the mechanisms with a relative large distance, all levels would be laid out horizontally.

4. **Technical**

   Scenes

   - Main Menu (Play and Continue Button)
   - Level Select (The overview of all levels and completed levels)
   - Gameplay

   Controls/Input

   Dragging based controls

   - Dragging the hand to throw items into the opposite direction
   - Dragging the hand to make the hand far from one fix point, the distance would represent the strength

   Classes/CCBs

   - Scenes
     - Main Menu
     - Level Select
     - Gameplay
   - Nodes/Sprites
     - Entity (abstract superclass)
       - Player
       - Police
     - Object (abstract superclass)
       - Gates
       - Tools (e.g. Money, Tooth Brush, Stone)
       - Gate Control Mechanisms

5. **MVP Milestones**

   Week 1 (2/10 – 2/13/2015)

   - Implement platformer physics
     - Add gravity to all entities/objects
     - Entity Movement
       - Moving policies
       - Moving gate control mechanisms

- Control Scheme for throwing items

Week 2 (2/16 – 2/20/2015) - *finishing a playable build*

- Design layout of one single prison cell
- Integrate gate control mechanism and throwing items to finish opening gate

Week 3 (2/23 – 2/27/2015)

- Finish and polish gate control mechanism and items' throwing
- More Level design

Week 4 (3/2 – 3/6/2015)

- Save user data – the progress of the player and how many items he has collected
- Level Select Scene

Week 5 (3/9 – 3/13/2015) – *Spring Break*

Week 6 (3/16 – 3/20/2015)

- Refine levels, begin level 2 and 3 implementation
- Playtest

Week 7 (3/23 – 3/27/2015)

- Refine levels, begin level 4 and 5 implementation
- Playtest

Week 8 (3/30 – 4/3/2015)

- Refine levels, begin level 6 and 7 implementation
- Playtest

Week 9 (4/6 – 4/10/2015) - *finishing core gameplay*

- Refine levels, begin level 8 and 9 implementation
- Playtest

Week 10 (4/13 – 4/17/2015)

- Refine control scheme
- Determine what other polish is needed

Week 11 (4/20 – 4/24/2015) - *finishing the polish*

- Integrate analytics
- Screenshots

- Write game description for App store

Week 12 (4/27 – 4/30/2015)

- Prepare for the game presentation