Final Game Document Plan: The Chameleon

CPSC 427 - Video Game Programming

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Team members

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Development Plan

Original Plan:
Week: November 15
- Implement game aesthetics, including authentic sprites and UI design

Week: November 22 -
- Final touches to fix minor bugs

Week: November 29 – **Final Game**
- Complete user flow from start screen to level select to levels
- Level designs that incrementally and intuitively teach game mechanics

Playable Game:
- Game timer
  - implemented using Freetype
  - Timer font modified
  - TImer resets for every level
  - Timer works with Pause functionality
- Color consequences updates
  - Flash updated - doesn't trigger alert mode
  - Green sound triggers alert mode for wanderers in a particular radius
- Sound effects
  - Added various sound effects
- Wanderers chase character if character gets too close
- Character impact by bullet changed (Character now is pushed away till wall collision)
- Wanderers walk back to their paths after alert mode finishes
  - Required improvements in pathfinding code
- Spotters have a correct Field of View now (45 degree arc and 70 units in reach)
- Advanced graphics:
  - Character has a stealthing animation
  - Spotter Flashlight Graphics
- Bullet collision with character :
  - Changes character colour to white
- Key game logic conceptualized
  - Screens flow updated

        - Start screen - Home Screen
        - Story Screen - Background of character, Now accessible as part of the start screen flow
        - Controls Screen - Controls options available to user, Now accessible as part of the start screen flow
- Bullet collision with character :
    - propels character back
    - Changes character colour to white
- Shooter changes direction depending on character movement direction
    - Shoots a bullet that when hit changes the main character's color back to white.
- Cutscene
    - Reimplemented cutscenes, dialogues, images used for visual aesthetics.
- Boundaries implemented
    - Wall collision
- Guard (Shooters) spawning implemented
- Guard (Spotter) field of view implemented.
    - Sprites changed accordingly to visualize changes in field of view.
- Screen overlay introduced
    - Alert mode visualization
    - Normal mode visualization
    - HUD
    - Cooldown bar
- Character scaling changes to make aesthetically better
- New character sprites with walking animation
- Multiple implementations of map
    - Tutorial
    - Test Map
    - Level_1 - 9 rooms
    - Level_2 - storage silo
    - Level_3 - Museum
    - Level_4 - Ruins
    - Level_5 - Labyrinth
- Hardcoding of npcs
- NPC AI
- Memory Leak detection (instruments, Visual Studio)
- Time profiling (instruments, Visual Studio)
- User Testing
    - UI test
        - Screen flow test
    - Level Test
        - Each level tested thoroughly to ensure user playability
    - Difficulty test
        - Level optimized to increase difficulty as story progresses
    - Optimization test
        - Game flow tested with story to ensure continuity

- Creative Component
- Wall collision animation with dash
- Original Cutscenes before each level
- Simple time-stepping mechanism
    - Compatible for both os
- Various wall textures implemented, change dependent on map
    - Ruins
    - Museum