# Final Game Document Plan: The Chameleon

CPSC 427 - Video Game Programming

Fall 2019/20

### 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)
- 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