**Hotline Habib**

**Final Project**

**Group Members:**

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**About the Game**

Hotline Habib is a top-down shooter video game developed on the Simple DirectMedia Layer **(SDL)** development library using the programming language C++. The game was inspired by Dennaton Games’ “Hotline Miami”. The game places you in various maps of Habib University which are crawling with CSOs trying to hunt you down. The objective is to shoot (using your stun gun) all the CSOs and proceed to the next room(s) until you reach the end of your mission.

**Game Information**

**Genre:** Shoot ‘em up

**Players:** One Player

**Resolution:** 1080x720

**Input:** Keyboard & Mouse

**Platform:** Microsoft Windows

**Controls**

**Movement:**

* W – Up
* A – Left
* S – Down
* D – Right

**Action:**

* P – Shoot
* O – Open Door

**Music:**

* 0 – Default Mix
* 1 – Track 1
* 2 – Track 2
* 3 – Track 3
* 4 – Track 4
* 5 – Track 5
* 6 – Track 6
* 7 – Track 7

**Design Patterns**

**Façade:** Our game.clean() function serves as a front-facing interface masking more complex underlying or structural code that allocates/de-allocates memory.

**Decorator:** Our “Camera” class adds functionality to an object at run-time without altering its structure. The camera is set to follow the player’s X & Y co-ordinates and so scrolls across the screen accordingly; there is no need to define separate classes to move/scroll through the game.

**Factory:** We’ve created a “Master” class which creates object without exposing the creation logic and refers to textures and rects (rectangles) using a common interface.

**Additional Packages**

* SDL\_TTF
* SDL\_Mixer
* SDL\_Image
* Windows.h
* Conio.h

**Progress Videos**

<https://www.youtube.com/playlist?list=PL0TQjePL0VDFqAiAT2Av4JtF6c5XhbcVh>

**Member Contributions**

**Affan:**

1. Player
2. Terrain
3. Window
4. Door
5. Enemy
6. People
7. Bullet
8. Collisions

**Ali:**

1. Leadership (management)
2. Progress videos
3. Game
4. Clean-up
5. Collisions
6. Artwork
7. Animation
8. Game Porting
9. Bullet

**Maaz:**

1. User Interface
2. Game
3. Player HUD
4. Artwork
5. Documentation
6. UML
7. Credits Slide
8. Terrain
9. Door
10. Window
11. Soundtrack
12. Team Poster
13. Progress Videos

**Sabah:**

1. Player
2. Enemy
3. Game
4. Bullet
5. Background
6. Texture
7. Camera
8. User Interface
9. Artwork

**External Sources & References**

* <https://opengameart.org/>
* <https://lazyfoo.net/tutorials/SDL/>
* A-ha – Take on Me (music)
* LMFAO – Sorry for party rocking (music)
* Tame Impala – Borderline (music)
* M83 – Midnight City (music)
* Twenty one pilots – Lane Boy (music)
* Aaron Smith – Dancin’ Krono Remix (music)
* Hotline Miami 2 – Untitled Main Menu Theme (music)

At the time of this documentation, our team has spent 3 weeks and 4 days working on this project.