| TODOS - Coded Dreams  |           | A                  | N                  | Р                      | V J                            | Done? | A       | N                  | Р                  | V                  | J       | Comments   |
|---|-----------|--------------------|--------------------|------------------------|--------------------------------|-------|---------|--------------------|--------------------|--------------------|---------|--|
| Update prototype to fit final delivery                                |           |                    |                    |                        | :00:00 0:00:0                  |       |         |                    |                    | _                  |         | Change map, improve player functionallity and copy just neccessary modules with 0 bugs   |
| requirements - Highscores screen                                      |           | 5:15:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0                  | Y     |         |                    | 0:00:00            |                    |         |  |
| - Selection screen  |           | 3:30:00            |                    |                        | :00:00 0:00:0                  |       | _       |                    | 0:00:00            |                    |         |  |
| - Background parallax<br>+Path  |           | 0:05:00            | 0:00:00            | 0:00:00 0              |                                | _     |         |                    | 0:00:00            | 0:00:00            |         |  |
| +Pushback Animations  |           | 0:00:00            |                    |                        | :25:00 0:00:0                  |       | _       | _                  | 0:00:00            |                    |         | Rip from the orignal game each sprite, from background to upper layer.   |
| +Special Code - Platforms Animation                                   |           | 0:00:00            | 0:00:00            | 0:00:00 0<br>0:00:00 0 |                                |       | _       |                    | 0:00:00            | 0:00:00            |         |  |
| +Pushback Animations  |           | 0:00:00            | 0:00:00            |                        | :35:00 0:00:0                  |       |         | _                  | 0:00:00            |                    | 0:00:00 |  |
| - 3 Fans  |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         | The image had to be expressed because of had included bluedones and associates   |
| - Edit upper background layer<br>- Characters                         |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :45:00 0:00:0<br>:00:00 0:00:0 |       |         | 0:00:00            | 0:00:00            |                    |         | The image had to be reformed because of bad isolation, blurriness, and proportions.  |
| +Marion   |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            |         |  |
| 1-Death Animation 2-Special Attack                                    |           | 0:00:00            | 0:00:00            |                        | :00:00 0:00:0                  |       |         |                    | _                  | 0:00:00            |         |  |
| 3-Particles   |           | 0:00:00            | 0:00:00<br>1:00:00 | 0:00:00 0              | :00:00 0:00:0                  | _     |         | 0:00:00<br>1:45:00 | 0:00:00            | 0:00:00            |         |  |
| 4-Powerup   |           | 2:15:00            | 4:00:00            | 0:00:00 0              | :00:00 0:00:0                  |       | 0:40:00 | 4:30:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| 5-Bomb<br>+Ash  |           | 3:00:00            | 0:00:00            |                        | :30:00 0:00:0<br>:00:00 0:00:0 |       |         | _                  | 0:00:00            |                    | 0:00:00 |  |
| 1-Death Animation   |           | 0:00:00            |                    | 0:00:00 0<br>0:00:00 0 |                                |       |         | 0:00:00            | 0:00:00            | 0:00:00            |         |  |
| 2-Special Attack  |           | 0:00:00            |                    | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| 3-Powerup<br>4-Bomb   |           | 0:15:00<br>2:30:00 |                    | 0:00:00 0              |                                | _     |         | 1:00:00            |                    | 0:00:00            |         | Bomb had to be ripped from zero as it wasn't present and added pushback animations.  |
| +Highscores   |           | 0:00:00            |                    | 0:00:00 0              |                                |       |         |                    |                    | 0:00:00            |         | Bomb had to be hipped from zero as it wasn't present and added pushback animations.  |
| +Insert Coins   |           | 1:15:00            |                    | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| +Power Up Scores - Powerup system                                     |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       |         |                    | 0:00:00            | 0:00:00            |         |  |
| - Bomb system   |           | 2:30:00            | 0:00:00            | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| - Enemy Drops   |           | 0:30:00            | 0:00:00            |                        | :00:00 0:00:0                  |       |         |                    |                    | 0:00:00            |         |  |
| - Miners<br>+Pushback anim  |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       | _       | _                  | 0:00:00            | 0:00:00            |         | Solved a bug   |
| +Pathing  |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 1:30:0                  | Y     | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 1:00:00 | I've inserted a 0.9f to the y axis to compensate the map overly speed.   |
| - The Trump   |           | 0:00:00            | 0:00:00            |                        | :00:00 0:00:0                  |       |         |                    | 0:00:00            | 0:00:00            |         | It was less time than expected since the required the old or institute in account.   |
| +Pushback anim<br>+Pathing  |           | 0:00:00            |                    | 0:00:00 0<br>0:00:00 0 |                                |       |         | _                  | 0:00:00            |                    |         | It was less time than expected since I've recycled the old animations in scene_castle  |
| - Easter egg  |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:15:0                  | Y     | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 0:10:00 |  |
| - Balloon<br>+Path  |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0<br>:00:00 0:30:0 |       |         |                    | 0:00:00            | 0:00:00            |         | Josep: There is a bug in the animation. I don't know how to solve it.  |
| +Path<br>+Shooting mechanic   |           | 0:00:00            |                    | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         | This was the first shooting mechanics implemented in the game. 2h 40min is beacuse of that.  |
| +Pushback Animations  | 4         | 0:00:00            | 0:00:00            | 0:00:00                | :25:00 0:05:0                  | Y     | 0:00:00 | 0:00:00            | 0:00:00            | 0:10:00            | 0:10:00 | Adding big explosion animation.  |
| +Death Animation - Drone  | 08-80     | 2:15:00<br>0:00:00 |                    | 0:00:00 0<br>0:00:00 0 |                                |       |         | 0:00:00            |                    | 0:00:00            |         | We tested the death animation in this enemy. It will cost less in the next enemies.  |
| +Path   |           | 0:00:00            | 0:00:00            |                        | :00:00 0:15:0                  |       |         | 0:00:00            |                    |                    | 0:00:00 |  |
| +Shooting mechanic  |           | 0:00:00            | 0:00:00            |                        | :00:00 0:00:0                  |       |         | 0:00:00            |                    | 0:00:00            |         |  |
| +Pushback Animations<br>+Death Animation                              | -         | 0:00:00            | 0:00:00            |                        | :15:00 0:00:0<br>:00:00 0:01:0 |       |         |                    |                    | 0:10:00<br>0:00:00 |         | Adding small explosion animation.  |
| - Mobile Turret   |           | 0:00:00            |                    | 0:00:00 0              |                                |       | _       | 0:00:00            | _                  | 0:00:00            |         |  |
| +Path   |           | 3:00:00            | 0:00:00            | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| +Shooting mechanic<br>+Pushback Animations                            | 15 E      | 0:30:00            | 0:00:00            | 0:00:00 0<br>0:00:00 0 | :00:00 0:20:0<br>:10:00 0:00:0 |       |         | 0:00:00            |                    | 0:00:00            |         | There is a bug in the third wave  Added medium explosion animation.  |
| +Spritesheet  |           | 1:00:00            | 0:00:00            |                        | :05:00 0:00:0                  | _     |         | 0:00:00            |                    | 2:00:00            | _       | ·  |
| +Death Animation  |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       | _       | _                  | _                  |                    | 0:00:00 |  |
| - Tank<br>+Path   |           | 0:00:00            |                    | 0:00:00 0<br>0:00:00 0 |                                | _     |         |                    | 0:00:00            |                    |         | Spritesheets totally remade.   |
| +Shooting mechanic  |           | 0:00:00            | 4:00:00            |                        | :00:00 0:00:0                  |       |         | 4:00:00            |                    | 0:00:00            |         |  |
| +Pushback Animations  |           | 0:00:00            |                    |                        | :55:00 0:00:0                  | _     |         |                    | 0:00:00            |                    | _       | Spritesheet redone completely.   |
| +Death Animation - Barrel   |           | 0:00:00            | 1:00:00            | 0:00:00 0              | :15:00 0:00:0<br>:00:00 0:00:0 |       | _       |                    | 0:00:00            | 0:15:00            |         | Solved one death pushback.   |
| +Pushback Animations  |           | 0:00:00            | 0:00:00            |                        | :15:00 0:00:0                  |       | _       | _                  | 0:00:00            |                    |         | Including its medium explosion animation.  |
| +Death Animation  |           | 0:00:00            |                    |                        | :15:00 0:00:0                  |       |         | 0:00:00            |                    |                    |         | Whole dead's spritesheet had to be redone.   |
| - Coins<br>+Pushback Animations                                       |           |                    |                    | 0:00:00 0              | :00:00 0:00:0<br>:00:00 0:00:0 |       |         |                    | 0:00:00            |                    |         |  |
| +Death Animation  |           |                    |                    |                        | :00:00 0:00:0                  |       |         |                    |                    |                    |         | We need to make the pushbacks for the big explosion for the death animation.   |
| - Flying Machine  |           |                    |                    |                        | :00:00 0:00:0                  |       |         |                    |                    |                    |         | The colliders should be smaller for the bullets to hit the surface of the sprite   |
| +Path<br>+Shooting mechanic   |           | 0:00:00            | 0:00:00            |                        | :05:00 0:00:0<br>:00:00 2:30:0 | _     |         |                    | 0:00:00            |                    |         | Big_shot does not work   |
| +Pushback Animations  |           | 0:45:00            | 0:00:00            | 0:00:00 2              |                                |       |         |                    |                    |                    |         | Spritesheet had to be rebuild and make fluid movement within different moves.  |
| +Death Animation  | MICH SHIP | 0:00:00            |                    | 0:00:00 0              | _                              |       |         | _                  | 0:00:00            |                    |         |  |
| - Falling Drone<br>+Path  |           | 0:00:00            | 0:00:00            |                        | :00:00 0:00:0<br>:00:00 0:00:0 |       |         |                    | 0:00:00<br>2:00:00 |                    |         |  |
| +Shooting mechanic  | 200       | 0:00:00            | 2:00:00            | 2:00:00 0              | :00:00 0:00:0                  | _     | 0:00:00 | 2:30:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| +Pushback Animations  |           | 0:00:00            | 0:00:00            | 3:00:00 0              | :07:00 0:00:0                  |       |         |                    |                    |                    |         | Adding small explosion animation.  |
| +Death Animation  |           | 0:00:00            |                    | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         | Some bugs appeared on the enemies explosions and death animation. I've used this as a test to try and solve it without succeding.  |
| - Torpedos  | 17471     | 0:00:00            |                    | 0:00:00 0              |                                | _     |         |                    | 0:00:00            |                    |         |  |
| +Path<br>+Shooting mechanic   |           | 0:00:00            | 2:00:00<br>0:00:00 | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| +Pushback Animations  |           | 0:00:00            | 1:30:00            | 0:00:00 0              | :00:00 0:00:0                  | Y     | 0:00:00 | 2:00:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| +Death Animation Boss First Stage                                     |           | 0:00:00            |                    | 0:00:00 0<br>0:00:00 0 |                                |       |         |                    |                    | 0:00:00            |         | Link to how should the sprite sheets be done:  |
| +Path   | TEN.      | 0:00:00            |                    | 0:00:00 0              |                                | _     |         |                    | 0:00:00            |                    |         | can to now should the sprite sheets be dutie.  |
| +Shooting mechanic  |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0                  | ) Y   | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| 1.Middle Turret (Small Shoot)     2.Head little cannons (Small Shoot) |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:45:0<br>:00:00 0:30:0 | _     | _       | _                  | 0:00:00            |                    |         | I had to repeat everything since I've confused the cpp   |
| 3.Bottom side cannons (Big Shoot)                                     |           | 0:00:00            |                    | 0:00:00 0              |                                | Y     |         |                    | 0:00:00            |                    |         |  |
| 4.Top side Cannons (Medium Shoot)                                     |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:30:0                  |       | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| +Pushback Animations  1.Antiaircraft cannons (bottom sides)           |           | 0:00:00            | 0:00:00            | 0:00:00 0<br>0:00:00 1 | :00:00 0:00:0<br>:05:00 1:30:0 |       | _       | _                  | 0:00:00            |                    |         | The sync between both antiaircrafts was more hard than I expected.   |
| 2.Base (2 extra animations)   |           |                    |                    |                        | :00:00 0:30:0                  |       |         |                    | 0:00:00            |                    |         | , and the second |
| +Base platform  |           | 0:00:00            | 0:00:00            |                        | :28:00 0:01:0                  |       |         | 0:00:00            |                    | 0:30:00            |         |  |
| +Frontal Sliding Protection +Tracks                                   |           | 0:00:00            | 0:00:00            |                        | :15:00 0:45:0<br>:05:00 0:10:0 |       |         | _                  | 0:00:00            |                    | 0:00:00 | These are added with the base one in order to avoid unnecessary code.  |
| 4.LeftSide  |           | 0:00:00            |                    |                        | :27:00 0:30:0                  | Y     | 0:00:00 | 0:00:00            | 0:00:00            | 0:30:00            | 0:00:00 | I tried to solve a problem when spawning the boss but I couldn't   |
| 5.RightSide   |           | 0:00:00            | 0:00:00            |                        | :57:00 0:30:0                  |       |         |                    | 0:00:00            |                    | 0:00:00 |  |
| 6.CentralSide +Vault(spawn animation)                                 |           | 0:00:00            |                    | 0:00:00 0              | :30:00 0:00:0<br>:00:00 1:30:0 | _     | _       | _                  | 0:00:00            |                    |         |  |
| +Red LEDs   |           |                    | 0:00:00            |                        | :45:00 0:30:0                  |       | _       |                    | 0:00:00            |                    | 0:00:00 | Ripping central side and antiaircraft sprites.   |
| +Dark PNG for the shadows   |           | 0:00:00            |                    |                        | :00:00 0:00:0                  |       |         | 0:00:00            |                    | 0:00:00            |         | Includes a situation of the significant of the sign |
| +Death Animation<br>+Red/White sprite sheets                          |           | 0:00:00            | 0:00:00            |                        | :30:00 1:30:0<br>:17:00 1:00:0 |       |         |                    | 0:00:00            |                    |         | Isolating sprites from the original game.  |
| Background parallax and camera Final Stage                            |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0                  | ) N   | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| Boss Second Stage   |           | 0:00:00            |                    | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
| +Path<br>+Shooting mechanic   | 150       | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0                  |       |         |                    | 0:00:00            |                    |         |  |
| 1-Medium Bullets  |           | 0:00:00            | 0:00:00            | 0:00:00 0              | :00:00 0:00:0                  | ) N   | 0:00:00 | 0:00:00            | 0:00:00            | 0:00:00            | 0:00:00 |  |
| 2-Big Bullets<br>+Pushback Animations                                 |           | 0:00:00            | 0:00:00            | 0:00:00 0              |                                |       |         |                    | 0:00:00            |                    |         |  |
|   |           | 0:00:00            | 0:00:00            | 0:00:00 0<br>0:00:00 0 |                                |       |         | _                  | 0:00:00            | 0:00:00            |         |  |
| 1-Spawn   |           |                    |                    |                        |                                |       |         |                    |                    |                    |         |  |
| 2-Fighting 3-Descending and Ascensing                                 |           | 0:00:00            |                    | 0:00:00 0<br>0:00:00 0 |                                |       |         | 0:00:00            | 0:00:00            |                    |         |  |

| - Disk                                     |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
|--|--------------|----------|----------|----------|----------|----------|---------------|----------|----------|----------|----------|----------|---|
| +Path                                      |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Shooting mechanic                         |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Pushback Animations                       |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Death Animation                           |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| - Web Page                                 |              | 3:00:00  | 0:00:00  | 0:00:00  | 0:20:00  | 0:00:00  | Y             | 3:00:00  | 0:00:00  | 0:00:00  | 0:30:00  | 0:00:00  | Power up and Bomb gifs.   |
| Sound                                      |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | N             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Power Up                                  |              | 0:30:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | Y             | 0:15:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Explosions                                |              | 0:00:00  | 0:45:00  | 0:00:00  | 0:00:00  | 0:00:00  | Y             | 0:00:00  | 1:30:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| +Characters Spawn                          |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:20:00  | 0:00:00  | Y             | 0:00:00  | 0:00:00  | 0:00:00  | 0:15:00  | 0:00:00  | Depending on each character sounds a different effect.                            |
| +Coins                                     |              | 0:05:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | Y             | 0:05:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| - Add the joystick in the inputs cpp code. |              | 2:15:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | Y             | 0:30:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| - Red /white images from the enemies       |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:15:00  | 0:00:00  | Y             | 0:00:00  | 0:00:00  | 0:00:00  | 0:10:00  | 0:00:00  | I've used photoshop to change sprites' colour.                                    |
| - User interface spritesheets              |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:21:00  | 0:00:00  | Y             | 0:00:00  | 0:00:00  | 0:00:00  | 0:16:00  | 0:00:00  |   |
| - Excel                                    |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 4:10:00  | Y             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 1:30:00  | It would be just 2h, but I couldn't figure out how to put images. (I still can't) |
| - Bugs                                     |              | 2:25:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | Y             | 4:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
| - Video                                    |              | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 2:30:00  | Y             | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  | 0:00:00  |   |
|  | Actual Time: | 50:00:00 | 29:10:00 | 18:30:00 | 34:52:00 | 35:49:00 | Guessed Time: | 28:10:00 | 30:15:00 | 10:00:00 | 29:31:00 | 31:14:00 |   |