Iteration Plan

High Level Objectives

Deployment: *There are two ways, the first is to click on the exe file. The second way is detailed below.*

1) To deploy the game, you must go to https://github.com/cncgen18/CSC440_RedSnapper to download the zip file.
2) After getting it, you must also install gamemaker to open the files here: https://www.yoyogames.com/get
3) You will need to sign up for gamemaker, or if you have a steam account you can also grab the free version on steam for free.
4) Afterwards, open gamemaker and open the file debauchery.gmx. Then hit the "run the game" button. It should open the game, and you should be able to play around with it.

Implementation:

The four use cases we picked for this iteration were: online score board, treasure chest, login & account creation, and spikes. While we wanted to add more use cases for gameplay, we also realized that creating an online function and login functions were necessary to the project. While it took a while to implement some of these use cases, we didn't really have that much to add or fix. We did add a dash effect for the dash just for fun. However, we didn't fix the pause menu, or implement the dynamic camera like I hoped we would. Nor did we implement more traps for gameplay purposes.

ONLINE SCOREBOARD:

For the online score board, we used the website GMScoreboard. Thanks to the tutorial on their website, we were able to implement the scoreboard with relative ease. We felt that this was important to put on to be able to upload the score count and be able to see it.

TREASURE CHEST:

The treasure chest was relatively easy. The player collides with the chest, and presses the z key. The chest turns green, and a hundred points are added to the global score variable. This is a pivotal part of the scoring system, as without it, there would be no score to upload to the scoreboard.

LOGIN & ACCOUNT CREATION:

The most difficult and hardest to implement for the whole project. To implement this, I used the .ini files to create and write the login credentials. It's very basic, and simple, and there isn't any encryption put on there for the moment. Hopefully in the future, we will be able to use this as a way to integrate it as the main save file for the game.

SPIKE:

The simplest use case for this part. If you collide with the spike, you are immediately thrown to the game over screen. A very rudimentary and basic of all traps, other than a pitfall.

List of work items with assignments

1) ***Demo:***
    a. *Creation of objects*
        i. Player
            1. Collision with spike
        ii. Gameover
            1. Attached new sprite to the room
            2. Created new functions that pertain to the sending the score online.
            3. As well as getting the top five scores online, and visiting the main website.
            4. Attached new functions, like the pause menu that allows the user to go back to the title menu, and restart at checkpoint.
        iii. Checkpoint
            1. Added effect. When collided, changes color.
        iv. Login
            1. Created object.
            2. Added key functions for opening unique files, as well as verifying said files, and credentials before letting the player go to the title screen.
        v. Account
            1. Created object.
            2. Added key functions for creating a unique file.
        vi. Spike
            1. Created object.
            2. Attached sprite.
        vii. Dash Effect
            1. Created object.
            2. Created new effect for dash. When pressed, instances of the player object are created and instantly destroyed to look like a shadow.
        viii. Chest
            1. Created object.
            2. Attached sprite.
            3. Programmed the chest to add points to the total global score whenever opened.
        ix. Score
            1. Created object.
            2. Programmed to draw the text in upper left corner.
    b. *Sprites*
        i. Gameover
            1. Created a sprite to be drawn to the game over screen.
        ii. Chest
            1. Created simple brown block. Once opened it changes to green.
        iii. Spike
            1. Created a simple triangle, to represent triangle.
        iv. Checkpoint
            1. Added a new sprite that changes color when touched.

c. *Rooms*
    i. Init
        1. Added the global.score to be initialized when game starts.
    ii. Login
        1. Created an empty room for the login object.
    iii. Account
        1. Created an empty room for the account object.

2) Vision:

a. *Use model changed*

3) Use Cases:

a. *Use model changed*
b. *Fully Dressed Used Case*
    i. Move
    ii. Jump
    iii. Gameover
    iv. Pause
    v. Dash
    vi. Checkpoint
    vii. Pause Menu
    viii. Pickup
    ix. Online Scoreboard
    x. Login & Account Creation
    xi. Spike
    xii. Treasure Chest

4) System Sequence Diagrams:

a. *System Sequence Diagrams*
    i. Online Scoreboard + alt
    ii. Login & Account Creation + alt
    iii. Treasure Chest + alt
    iv. Spike + alt

5) Iteration Plan:

a. *Deployment Instructions*
b. *Implementation*
c. *Evaluation Criteria*

6) Design Document:

a. *System Sequence Diagram*
    i. Online Scoreboard
    ii. Login & Account Creation
    iii. Treasure Chest
    iv. Spike

7) Test Plan:

8) Security Document

Evaluation criteria:

1) ***Online Scoreboard (95%)*** – The Online Scoreboard works completely. You can upload your score, and you can see the top five scores. However due to still not getting a response from the service, I have not been able to confirm my account. So, thus I have not been able to make my own custom scoreboard. I have been able to use the example scoreboard given in the tutorial as a means to test. If I had more time, I would have liked to figure out how to draw a more pleasant way of reading the online scoreboard.
2) ***Spikes (100%)*** – Spike does what it's exactly supposed to. The player collides with the spikes; they go to game over. If there is anything I would have liked to add, it would have been a better looking spike.
3) ***Login & Account Creation (100%)*** – While it works, there are several things I would like to add to it later on. Such as integrating it to a save file system, and adding encryption to the file itself. Other than that, I believe it works as intended.
4) ***Treasure Chest (100%)*** – Treasure chest works like intended. The player collides with the treasure chest, he uses the z key, and is able to open it. Score is added, and the treasure chest is very pivotal to a scoring system for the online scoreboard.

Action Items:

Item	Iteration	Completed by
Implementation of Move	1	Alan
Implementation of Jump	1	Alan
Implementation of Pause	1	Alan
Implementation of GameOver	1	Alan
Domain Model	1	Alan
Iteration Plan	1	Alan
Design Document	1	Alan
System Sequence Diagrams	1	Alan
Implementation of Title Screen	2	Alan
Implementation of Dash	2	Alan
Implementation of Checkpoint	2	Alan
Implementation of Pause Menu	2	Alan
Iteration Plan	2	Alan
Class Diagram + Design Explanation	2	Alan
Dash System Sequence Diagram	2	Michael
Title Screen System Sequence Diagram	2	Jeff
Checkpoint System Sequence Diagram	2	Alan
Pause Menu System Sequence Diagram	2	Eric
Dash Sequence Diagram	2	Michael
Title Screen Sequence Diagram	2	Jeff
Checkpoint Sequence Diagram	2	Alan
Pause Menu Sequence Diagram	2	Eric
Dash Fully Dressed Case	2	Michael

Title Screen Fully Dressed Case	2	Jeff
Checkpoint Fully Dressed Case	2	Alan
Pause Menu Fully Dressed Case	2	Eric
Vision	2	Alan
Implementation of Login & Account Creation	3	Alan
Implementation of Spike	3	Michael
Implementation of Online Scoreboard	3	Alan
Implementation of Treasure Chest	3	Alan
Iteration Plan	3	Alan
Class Diagram + Design Explanation	3	Alan
Vision	3	Alan
Test Plan	3	Alan
Security Document	3	Alan
Login & Account Creation System Sequence Diagram	3	Jeff
Spike System Sequence Diagram	3	Michael
Online Scoreboard System Sequence Diagram	3	Alan
Treasure Chest System Sequence Diagram	3	Eric
Login & Account Creation Sequence Diagram	3	Jeff
Spike Sequence Diagram	3	Michael
Online Scoreboard Sequence Diagram	3	Alan
Treasure Chest Sequence Diagram	3	Eric
Login & Account Creation Sequence Diagram	3	Jeff
Spike Sequence Diagram	3	Alan
Online Scoreboard Sequence Diagram	3	Alan
Treasure Chest Sequence Diagram	3	Eric
Login & Account Creation Fully Dressed Case	3	Jeff
Spike Fully Dressed Case	3	Michael
Online Scoreboard Fully Dressed Case	3	Eric
Treasure Chest Fully Dressed Case	3	Alan