General

- Write down any asset names used + website.
- Write down any sound clip names used + website.

Saif

1. *All Menus*
   a. Main menu:
      i. Start: takes the player to the choose character screen which allows him/her to choose his/her the character of this game play the game.
      ii. Options
         1. Audio
            a. Music level
            b. Sound effects level
         2. How to Play
         3. Credits
      iii. Quit Game
   b. Choose Character: allows the player to choose a character. This character cannot be changed throughout the game.
   c. Pause Screen:
      i. Resume
      ii. Restart
      iii. Quit to main menu
   d. Game Over Screen:
      i. Restart Level
      ii. Quit to main menu
2. *HUD Display*
   a. Display area where players can see their character's vital statistics.
   b. Health bar
   c. Ammo count (Ammo Count/Maximum Ammo)
   d. Special-ability bar
   e. Weapon selected (Name)
   f. Battle Region Indicator (tells whether the player is inside or outside the region)

Nour

1. *Audio Mixer*
   a. 2 independently controllable categories; Music and Sound effects (SFX).
   b. Create at least one audio mixer with at least two groups other than the master.
   c. Each group should represent one of the two categories and all the clips belonging to that category must pass through it.
2. *Sound Clips*
   a. Effects
      i. Footsteps of player champion as he moves.
      ii. Footsteps of enemy hero as he moves.
      iii. Footsteps of enemy champion as he moves.
   b. Feedback
      i. When player is hit.

ii. When player dies.
iii. When an enemy is hit.
iv. When an enemy dies.
v. When picking up a weapon.
vi. When switching the weapon.
vii. When bullets are fired.
viii. When bullets hit an enemy.
ix. When bullets hit the player.
x. When player exits the battle region.
xi. When player enters the battle region.
xii. When activating core ability.
xiii. When activating defensive ability.
xiv. When activating the teleport ability.

3. *Music*
   a. Slow-paced track for the main and pause menus.
   b. At least two tracks for the game levels depending on the atmosphere.

Raneem

1. *Player Basics*
   a. A player is controlled in a 1st person perspective.
   b. A player can toggle between standing and crouching by pressing the crouch button.
   c. A player CAN NOT sprint while crouched. Pressing the sprint button while crouched automatically un-crouches the player (stands up).
   d. A player initially has 100 health points, which is the maximum.
   e. Whenever the player gets hit, he/she loses an amount of health points based on the weapon used to attack him/her.
   f. A player can pick up health packs from the ground and thus, their health increases by 25, unless the player's health points are less than 75.
   g. Whenever the player's health points reach zero, the player dies and "Game Over screen" is displayed.
   h. Any item that gets picked up from the ground by the player should be destroyed.

2. *Player Controls*
   a. The player controls the camera with the mouse movement (player Look At).
   b. The player controls the walking movements forward and backward using the up and down keys as well as the "W" and "S" keys respectively.
   c. The player controls the champion walking movement right and left using the right and left keys or the "A" and "D" keys respectively.
   d. The player runs/sprints by holding down left-shift along with one of the movement keys.
   e. The player jumps by pressing space.
   f. The player double jumps by pressing space mid-air.
   g. The player crouches by pressing "C" or left ctrl key.
   h. The player can activate their special-ability by pressing "Q" key.
   i. The player can pause the game by pressing ESC.

3. *Player Animations*
   a. Falling (Once the player loses in the combat, the animation will be played on a 3D Model representing the player).
   b. Idle (or) Celebration (Once the player wins in the combat, the animation will be played on a 3D Model representing the player).

  c. Pick Up (Hands 3D model should be used to apply the pickup animation on picking up any item).

4. ***Characters:*** *note that all the characters' abilities should be implemented only in the Combat Level*

  a. Loba

    i. Passive-ability: Secondary Ammunition - The character has double amount of the maximum secondary ammunition.

    ii. Special ability: Teleportation - Whenever teleportation ability is activated, the player throws a certain object (3D model) in a curve downwards. On contact with the ground, the player teleports to the location of the object and the object gets destroyed.

  b. Bangalor

    i. Passive-ability: Fast Runner - This character has the ability to run twice as fast as the other characters' running speed.

    ii. Special ability: Defensive Shield - Visually represented as a small front-faced shield deployed only around the player which protects them from any damage for 10 seconds.

5. ***Special Abilities***

  a. The maximum value the special-ability meter can have is 100.

  b. The special-ability meter starts off empty.

  c. The special-ability meter increases by a rate of 5 special-ability points per second. The regeneration stops once it reaches the maximum amount of special-ability.

  d. A player can perform their special-ability by pressing the "special-ability" button if and only if their special-ability meter is full (reaches 100) and the special-ability is not already deployed.

  e. After performing the special-ability, its meter should be reset to zero.

~~Khalifa~~

1. ***Weapon Controls***

  a. The player fires bullets from their currently equipped weapon using left mouse click.

  b. The player can pick up weapons by pressing "E" key.

  c. The player can reload their currently equipped weapon using "R" key.

  d. The player can switch between different weapons types (primary with secondary and vice versa) using "Z" key.

2. ***Basics***

  a. Initially, a player is not equipped with any weapon.

  b. A player's ammunition (secondary and primary) is initially empty.

  c. A player can pick up primary/secondary weapon ammunition from the ground.

  d. The player keeps track of the number of enemies shot by (him/her).

  e. A player can pick up primary/secondary weapons.

  f. A player can hold up to one primary weapon and one secondary weapon.

  g. When a player picks up a primary weapon, the player drops the currently equipped primary weapon, then he/she picks up the newly equipped primary weapon.

  h. When a player picks up a secondary weapon, the player drops the currently equipped secondary weapon, then he/she picks up the newly equipped secondary weapon.

  i. When a player picks up a primary weapon while holding a secondary weapon, the picked up primary weapon gets stored without being swapped with the currently secondary weapon.

j. When a player picks up a secondary weapon while holding a primary weapon, the picked up secondary weapon gets stored without being swapped with the currently primary weapon.

k. A player can use the fire button to fire their currently equipped weapon as long as it currently contains ammunition (Ammo).

l. Some weapons require holding the fire button, while others require a single press.

m. A player can carry maximum 150 amount of primary weapon ammunition.

n. A player can carry maximum 5 amount of secondary weapon ammunition.

o. Whenever a player picks up a primary ammunition, the respective stored type increases by an amount of 50, (if and only if) the amount currently stored is below the respective amount.

p. Whenever a player picks up a secondary ammunition, the respective stored type increases by an amount of 2, (if and only if) the amount currently stored is below the respective amount.

q. A player can refill their currently equipped primary weapon from the stored primary ammunition weapon.

r. A player can refill their currently equipped secondary weapon from the stored secondary ammunition weapon.

3. ***Primary Weapons***

    a. Properties of each weapon:

        i. Damage Amount: The amount of damage each bullet deals.

        ii. Firing Mode:

            1. Automatic (fires by holding).

            2. Single-shot (Fires on single press).

        iii. Fire Rate: How many bullets are fired per second.

        iv. Ammo Count: The maximum amount of bullets in a weapon

        v. Range: The distance the bullets is effective for, after which no damage is dealt.

    b. Types:

        i. Assault Rifle

            1. Damage Amount: 10

            2. Firing Mode: Automatic

            3. Fire Rate: 10

            4. Ammo Count: 35

            5. Range: 65

        ii. Sniper Rifle

            1. Damage Amount: 85

            2. Firing Mode: single shot

            3. Fire Rate: 1

            4. Ammo Count: 6

            5. Range: 100

        iii. Shotgun

            1. Damage Amount: 70

            2. Firing Mode: single shot

            3. Fire Rate: 3

            4. Ammo Count: 12

            5. Range: 30

4. ***Secondary Weapons***

    a. Secondary weapons can damage not only the enemies, but also the player himself.

    b. Types:

       i. Flame Grenade Launcher: it launches a grenade projectile, that fires in a curve downwards, and creates a flame explosion of a radius of 4 units for a period of 5 seconds upon making contact with an object. The fiery explosion causes a damage of 25 points per second to the anyone within its range.

      ii. Grenade Launcher: it launches a grenade projectile, that fires in a curve downwards, and creates an explosion of a radius of 4 units upon making contact with an object. The explosion causes a damage of 50 points to the anyone within its range.

~~Rowan~~

1. Enemies (AI)

  a. Champion

    i. Basics:

      1. Enemy champion can either stand idle or walk in patterns around the arena.
      2. Enemy champion should go after and attack the player whenever the player enters his/her range.
      3. Enemy champion can use their primary weapon to attack the player.
      4. Enemy champion CAN NOT jump, double jump, crouch, change weapons.
      5. Enemy champion initially has 100 health points.
      6. Enemy champion should have a health bar above them.
      7. Enemy champion attacks every fixed interval (e.g., every 3 seconds) while the player is in range.
      8. Whenever an enemy champion gets hit, he/she loses an amount of health points based on the damage amount of the weapon used to attack him/her.

    ii. Animations:

      1. Idle
      2. Walking
      3. Sprint/Run
      4. Firing Weapon
      5. Hit Reaction
      6. Dying

  b. Hero

    i. Basics:

      1. Enemy hero can either stand idle or walk in patterns around the arena.
      2. Enemy hero should go after and attack the player whenever the player enters his/her range.
      3. Enemy hero can only use its primary weapon to attack the player.
      4. Enemy hero CAN NOT jump, double jump, crouch, change weapons.
      5. Enemy hero initially has 400 health points.
      6. Enemy hero should have a health bar above them.
      7. Enemy hero attacks every fixed interval (e.g., every 3 seconds) while the player is in range.
      8. Whenever the enemy hero gets hit, he/she loses an amount of health points based on the damage amount of the weapon used to attack him/her.

        ii. Animations:
             1. Idle
             2. Walking
             3. Sprint/Run
             4. Firing Weapon
             5. Hit Reaction
             6. Dying

~~Heidi~~

1. ***Levels***
    a. Combat Level
        i. A combat level is a level where the player must kill all enemies before reaching the end.
        ii. A combat level must contain both enemy champions and enemy heroes.
        iii. A combat level must contain a minimum of 12 enemy champions.
        iv. A combat level has 3 different types of enemy champions where each type has a particular primary weapon equipped.
        v. A combat level must contain a minimum of 6 enemy heroes.
        vi. A combat level should have 2 different types of enemy heroes.
        vii. When the player is the only remaining survivor within the battle region, he/she goes automatically to the next level.
        viii. Battle Region:
            1. A visually represented spherical area that surrounds the player and the enemies.
            2. Initially, it encapsulates the whole environment, then shrinks every 30 seconds until it is fully vanished.
            3. The game play interactions occur normally within this zone. Whenever the player is outside the zone, he/she will lose 10 health points every 10 seconds.
            4. In addition, whenever an enemy is outside the zone, he/she dies.
        ix. If the player dies, the credits will roll and the game ends.
    b. Parkour Level
        i. A parkour level is the 2nd level of the game where the player must use the champion's platforming abilities (i.e., jumping, double-jumping, crouching) to reach a goal area.
        ii. In this level the player dies by falling into an endless void if they fail to platform correctly.
        iii. Choose from one of the levels of the original game (apex legends) or create your own.
        iv. When the player finishes a level by reaching a particular trigger area the game ends and credits roll.