Gameplay Test Documentation

Implemented Features :

- Gravity gun
- Abilities
- Quest System

1. Gravity Gun (20 hours)

1. Description

- Modified existing shooting mechanic from First Person Project template.
- Attract object(s) by holding down LMB and expels the object when LMB is released.
- Added toggle to either attract a single object or multiple at once.
- Can modify firing force, pick up radius and attraction force in blueprint

2. What I am proud of

- I am happy that I was able to make the attraction effect look smooth and consistent by temporarily stopping their physics simulation.

3. What can be improved

- For the multi targeting effect, it would be nice to somehow allow collision between attracted objects while keeping its physics simulation off so that they do not bounce around when hitting obstacles.

2. Abilities (18 hours)

3. Description
    - Made use of GAS plugin to create 2 abilities, Dash and a Molotov
    - Dash applies a root motion on the player with a 5 seconds cooldown
        - Hotkey set to L-Shift.
    - Molotov tosses a projectile which create a AoE that causes damage
        - Hotkey set to G.
        - AoE is displayed by a visible in-game collider.
        - Damage number, effect radius and effect duration can be modified.
        - Molotov effects always try to spawn on the floor closest to the projectile impact point.
    - Damage can be tested by having the player character walk into the molotov effect.
    - Health UI is implemented and level restarts on death.

4. What I am proud of
    - Honestly, I am glad that I was even able to properly implement the GAS system.
    - Managed to make it so that the molotov will always spawn on the floor when it collides with other surfaces to create a more realistic result.

5. What can be improved
    - Didn't manage to properly make UI for cooldown display

3. Quest System (14 hours)

1. Description

- Made using a combination of structs and data tables.
- Quest log can be displayed by pressing J.
- New quests can be made by populating the data table.
- Quest can be given to the player on start by adding an actor with the “Quest Giver Actor Component” and specifying the quest to give.
- Quest’s objectives are tracked by calling the OnObjectiveIDCalled event..

2. What I am proud of

- Most proud of being able to properly implement this as it's the first time doing such a system.
- Working UI to display current quests and their progress.

3. What can be improved

- Had ideas for different types of quests but could not make it in time.
- Implementation of on-screen UI of current tracked quest would be nice.