1. Restrictions & Technical Requirements

a. You will have to create a public GitHub repository
b. You will have to estimate your research time before starting, build a diagram of your project and class structure
c. After the research, you will have to estimate the time for the project
d. Keep the public references count to a minimum
e. Use as many events/listeners and OOP properly
    i. Every component must be able to behave on its own
    ii. Every behaviour must be extendable forever; this project will be a very simple one but organize it as you would have to add features and updates to it
f. Animations/particles/audio/camera effects are optional
g. Write instructions for a Game Designer for where/how to tweak values

2. Gameplay: Rock Climber 3D

Short description:

The player controls a ragdoll. The player has to reach the top of the wall by climbing on rocks.Tap on the next rock to reach it. In its journey to the next rock, the character could be hit by different obstacles (i.e. static spikes, moving saws)

Mechanics:

a. Use a ragdoll character
b. Tapping on a rock will launch the character to it
c. The character should only attach to the rocks with its hands
d. Expose all the configurable parameters to something easily modifiable by Game Designers (SO, JSON, static class, etc)

3. References & Tips

a. Work your way up from the most basic behaviours and extend accordingly
b. Don't include too much behaviour in a single class. Extend it further
c. Don't mix behaviours that shouldn't interfere with one another. Split them and build a proper communication system between the 2 of them
d. Add documentation if any method/component/etc needs more explanation