

# Download the Starter Pack

1. Download the Course 2 Project Starter Pack ZIP file<sup>[1]</sup>
  1. Unzip the Starter Pack ZIP file to a convenient location on your computer.
  2. Open up the ZIP and load the scene titled VRND-Course2-Project\Scenes\VRND-Course2-Starter\_Project.unity
2. You'll see an empty apartment with just a floor, ceiling, some walls, windows, and a door.

## Add Models to the Empty Apartment

- Add at least 15 new models to the apartment.
  - Use the prefabs found at VRND-Course2-Project\Art\Prefabs\Props
  - Use LOTS of models and make it detailed.
    - However, you probably shouldn't add more than 50 props since it will likely be too much for your phone.

## Add VR Functionality

- Add Cardboard functionality to your scene
  - Review the earlier course materials if you're uncertain how to do this.

## Deploy

- Deploy to your phone
  - Adjust the player and quality settings for peak performance.
    - See the Project Rubric for full details
  - Build and Run
  - Plug in your phone and deploy!

## Add Lights

- Light the scene

- Add some area lights. spotlights, and one directional light (for the sun) to your room
- Make sure all lights are set to “Bake” and not realtime!
  - Be sure to mark all objects and lights as static
- Bake the lighting
  - See the Project Rubric for full details
- Deploy again!

## Create an Animated Globe

- Create a globe that should spin until you press the button again.
  - Create a sphere primitive
    - Be sure to label it “Globe”
  - Create a new Globe material and assign a globe texture
    - Use the Mobile/Diffuse shader
    - Texture is located at: VRND-Course2-Project/Art/Textures/GlobeTexture.png
- Assign the Globe material to the sphere primitive
- Create an animation clip and animation controller
  - Create an animation of the globe rotating 360 degrees
    - To keep the globe tilted, try creating an empty GameObject and setting the globe to be its child. Something like:
      - GlobeParentObject
        - Globe
          - Then tilt the parent (around 25 degrees) and rotate the globe along its Y axis.
- Create a trigger in the animation controller that spins the globe 360 degree every time is it trigger
  - Use the provided TriggerAnimation script to activate the trigger whenever you click on the globe

## Optimization

- If you’d like things to run faster, here are some ideas:
  - Update shaders
    - Switch the Apartment Material to Mobile / Unlit (supports lightmap)
      - VRND-Course2-Project/Art/Models/Apartment/Materials/Apartment

- Do the same for all of the materials used in the apartment scene
- These shaders are much, much faster
- Double-check that all of your models and lights are set to Static
  - The only model that should be dynamic (not Static) is the globe because it rotates.
- Double-check that your lights are set to “Baked”

## README File

You must also include a **README.md** in the top directory. In it, please include your name, how long it took to complete the project, and one thing you liked and one thing that was challenging about this project.

## Done!

### Links

1. <http://www.udacityvr.com/downloads>