

Topic	SELF DESIGN PROJECT STAGE 1: SET UP SCENE	
Class Description	Students will set up the virtual reality scene for the car drive simulation.	
Class	C189	
Class time	45 mins	
Goal	<ul style="list-style-type: none"> <li>Design / add features in the project by writing code.</li> <li>Test and debug the code for the project.</li> </ul>	
Resources Required	<ul style="list-style-type: none"> <li>Teacher Resources:               <ul style="list-style-type: none"> <li>Visual Studio Code Editor</li> <li>laptop with internet connectivity</li> <li>smartphone</li> <li>earphones with mic</li> <li>notebook and pen</li> </ul> </li> <li>Student Resources:               <ul style="list-style-type: none"> <li>Visual Studio Code Editor</li> <li>laptop with internet connectivity</li> <li>smartphone</li> <li>earphones with mic</li> <li>notebook and pen</li> </ul> </li> </ul>	
Class structure	<b>Warm-Up</b> <b>Teacher-led Activity</b> <b>Student-led Activity</b> <b>Wrap-Up</b>	<b>05 mins</b> <b>15 mins</b> <b>20 mins</b> <b>05 mins</b>
WARM-UP SESSION - 5 mins		
<b>CONTEXT</b> <ul style="list-style-type: none"> <li>Start working on the self design project.</li> </ul>		



### Teacher Starts Slideshow

#### Slide 1 to 3

Refer to speaker notes and follow the instructions on each slide.

Hey <student's name>. How are you? It's great to see you!  
Are you excited to learn something new today?

#### Following are the WARM-UP session deliverables:

- Greet the student.
- Revision of previous class activities.

**ESR:** Hi, thanks!  
Yes I am excited about it!

Click on the slide show tab  
and present the slides

### WARM-UP QUIZ

Click on In-Class Quiz




### Continue WARM-UP Session

#### Slide 4 to 8



#### Following are the session deliverables:

- Appreciate the student.
- Narrate the story by using hand gestures and voice modulation methods to bring in more interest in students.

Class Steps	Teacher Action	Student Action
<b>Step 1: Warm-Up (5 mins)</b>	Hi, how are you?  Great!	<b>ESR:</b> I am good!
	Do you want to quickly describe the car drive project that you will be building?  <i><b>Note:</b> Encourage the student to discuss what they remember and help them to be more involved.</i>	<i><b>Note:</b> The student discusses his/her views with the teacher.</i>

	<p>Why virtual reality simulation can be beneficial?</p> <p>Why should we make this?</p> <p>What is the theme of your story?</p> <p>What is it trying to communicate or express to other people?</p> <p>Can it be useful of disable people?</p> <p>What does it tell about the world we live in?</p> <p>Now that we have some ideas on how to get started with simulation and how our application can be helpful?</p> <p>Let's get started then.</p>	
<div>  <p><b>Teacher Ends Slideshow</b></p> </div>		
<b>TEACHER-LED ACTIVITY - 15 mins</b>		
<b>Teacher Initiates Screen Share</b>		
<p style="text-align: center;"><b><u>CHALLENGE</u></b></p> <ul style="list-style-type: none"> <li>Start working on the self design project.</li> </ul>		

<p><b>Step 2: Teacher-led Activity (15 mins)</b></p>	<p>Can you tell me how we need to start?</p> <p>Yes. Perfect!</p> <p>What elements will you need to set up your scene environment?</p> <p>Amazing!</p> <p>Any points that we need to be careful with while making the scene?</p> <p>While making a virtual reality, the foremost thing that we should be careful about is:</p> <ul style="list-style-type: none"> <li>• The load due to the complete scene.</li> <li>• That the scene should not have a heavy 3D model, otherwise it might crash in less powerful systems.</li> <li>• That the scene should not be too complicated, we should be able to navigate and understand the scene.</li> </ul>	<p><b>ESR:</b> We need to set up the virtual reality scene using A-Frame.</p> <p><b>ESR:</b> We need:</p> <ul style="list-style-type: none"> <li>• 3D Models</li> <li>• Images</li> <li>• Sounds</li> </ul> <p><b>ESR:</b> Varied.</p>
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	Now you can create the scene.  Are you excited?	<b>ESR: Yes!</b>
<b>Teacher Stops Screen Share</b>		
	Now it's your turn. Please share your screen with me.	
<div>  <b>Teacher Starts Slideshow</b>  <b>Slide 9 to 11</b>          Refer to speaker notes and follow the instructions on each slide.       </div>		
We have one more class challenge for you. Can you solve it?  Let's try. I will guide you through it.		
<div>  <b>Teacher Ends Slideshow</b> </div>		
<b>STUDENT-LED ACTIVITY - 20 mins</b>		
<ul style="list-style-type: none"> <li>• Ask the student to press the ESC key to come back to the panel.</li> <li>• Guide the student to start screen share.</li> <li>• Teacher gets into fullscreen.</li> </ul>		
<p align="center"><b><u>ACTIVITY</u></b></p> <ul style="list-style-type: none"> <li>• Start working on the self design project.</li> </ul>		
<b>Step 3:</b> <b>Student-led Activity</b> <b>(20 mins)</b>	<i>Guide the student to come with their ideas to build the car drive simulation scene.</i>  What elements will be needed for the car simulation scene?	<b>ESR: We need:</b> <ul style="list-style-type: none"> <li>• Environment</li> </ul>

	<p>What could be the possible environment?</p> <p>Let's find the assets(3D Models/images etc) to create the scene.</p> <p><i>Guide the student to build the car drive simulation scene.</i></p>	<ul style="list-style-type: none"> <li>Steering Wheel</li> <li>Accelerator</li> <li>Break</li> </ul> <p><b>ESR:</b> We can have:</p> <ul style="list-style-type: none"> <li>A city</li> <li>Mountains Roads</li> </ul>
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**Note:** *This is just for the teacher's reference. Since this is a self design class students will build their own VR scene.*



**Teacher Guides Student to Stop Screen Share**

**WRAP UP SESSION - 5 mins**



**Teacher Starts Slideshow**  
**Slide 12 to 15**

**Activity details**

**Following are the WRAP-UP session deliverables:**

- Appreciate the student.
- Revise the current class activities.
- Discuss the quizzes.

**WRAP-UP QUIZ**  
Click on In-Class Quiz



**Continue WRAP-UP Session**  
**Slide 16 to 21**

**Activity Details**

**Following are the session deliverables:**

- Explain the facts and trivia
- Next class challenge
- Project for the day
- Additional Activity (Optional)

**FEEDBACK**




- **Appreciate and compliment the student for trying to learn a difficult concept.**
- **Get to know how they are feeling after the session.**
- **Review and check their understanding.**

**Teacher Action**

**Student Action**

You get Hats off for your excellent work!

*Make sure you have given  
at least 2 Hats Off during  
the class for:*

		<div>Creatively Solved Activities  +10</div> <div>Great Question  +10</div> <div>Strong Concentration  +10</div>
<p align="center"><b>PROJECT OVERVIEW DISCUSSION</b></p> <p align="center">Refer the document below in Activity Links Sections</p>		
<p align="center"><b>Teacher Clicks</b></p> <p align="center"><a href="#">✕ End Class</a></p>		
<b>Additional Activities</b>	<p><i>Encourage the student to write reflection notes in their reflection journal using markdown.</i></p> <p>Use these as guiding questions:</p> <ul style="list-style-type: none"> <li>• What happened today? <ul style="list-style-type: none"> <li>◦ Describe what happened.</li> <li>◦ The code I wrote.</li> </ul> </li> <li>• How did I feel after the class?</li> <li>• What have I learned about programming and developing games?</li> <li>• What aspects of the class helped me? What did I find difficult?</li> </ul>	<p><i>The student uses the markdown editor to write their reflections in a reflection journal.</i></p>

Activity	Activity Name	Links
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Teacher Reference	Self Design Project Final Code	<a href="https://github.com/whitehatjr/PRO-C189-192-Reference">https://github.com/whitehatjr/PRO-C189-192-Reference</a>  <b>Note:</b> The model used in the Reference might vary based on availability of model as these models are used form a third-party website. Although the functionality of the project will not be affected by this.
Student Activity	Self Design Project Stage 1	--NA-- <b>Note:</b> As it is an open-ended project, there is no specific solution. The student is expected to work on this project on their own, with teacher's guidance.
Teacher Reference 1	Project Document	<a href="https://s3-whjr-curriculum-uploads.whjr.online/dc3a7f43-a79f-47c1-92ca-97e9aeaf6ee1.pdf">https://s3-whjr-curriculum-uploads.whjr.online/dc3a7f43-a79f-47c1-92ca-97e9aeaf6ee1.pdf</a>
Teacher Reference 2	Visual-Aid	<a href="https://s3-whjr-curriculum-uploads.whjr.online/36e64446-d97b-4b67-ae90-be977f9a0e0f.html">https://s3-whjr-curriculum-uploads.whjr.online/36e64446-d97b-4b67-ae90-be977f9a0e0f.html</a>
Teacher Reference 3	In-Class Quiz	<a href="https://s3-whjr-curriculum-uploads.whjr.online/1a383098-5fa6-4ce9-aed3-6e93c668305d.pdf">https://s3-whjr-curriculum-uploads.whjr.online/1a383098-5fa6-4ce9-aed3-6e93c668305d.pdf</a>