

# VR Project Design Document

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## 1 App Info

Tentative Title:	<b>Wizard's Dungeon Laboratory</b>
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<input type="checkbox"/>	Education & Training	<input type="checkbox"/>	Mental Health & Fitness
<input type="checkbox"/>	Travel & Discovery	<input checked="" type="checkbox"/>	Media & Entertainment
<input type="checkbox"/>	Productivity & Collaboration	<input checked="" type="checkbox"/>	Gaming
<input type="checkbox"/>	Art & Creativity	<input type="checkbox"/>	Other: _____

## 2 Pitch

The goal is for users to play:

Our goal is to create a wizard's lab where one can follow recipes and create objects by mixing different magical ingredients.

This will be especially fun in VR b/c:

It will be fun because one mixes bizarre ingredients!

At a high level, during the app, users will:

Be able to grab different objects, like – grabbing books, ingredients, etc. and be able to interact with them, like – opening books, adding ingredients to the boiler to make new objects, using the objects to unlock other books. Other objects that are grabbable can also be put into the boiler and all objects will be respawned.

This experience will be targeted at devices with:

<u>6</u>	degrees of freedom, giving users control over the	<u>movement &amp; rotation</u>	of their head & controllers.
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## 3 Basics

The app will take place in:

Dungeon

and the user will get around the scene with:

Continuous

movement.

The user will be able to grab:





- books
- key
- all objects on the shelves

There will be sockets:

- on the reading stand for the book
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## Project Grading Checklist

Item	Points	Done? ( <input checked="" type="checkbox"/> / <input type="checkbox"/> )
<b>VR Project Setup &amp; Scene Configuration</b>	<b>10</b>	<input checked="" type="checkbox"/>
Unity project is properly set up with <b>VR integration</b> for Quest 3.	2	<input checked="" type="checkbox"/>
The environment is designed for <b>smooth VR navigation</b> .	2	<input checked="" type="checkbox"/>
Proper <b>scene lighting and object placement</b> for VR immersion.	2	<input checked="" type="checkbox"/>
Build runs successfully on Quest 3 with <b>no major errors</b> .	2	<input checked="" type="checkbox"/>
Basic interactions (grabbing, moving) are <b>working correctly</b> .	2	<input checked="" type="checkbox"/>
<b>Locomotion System Implementation</b>	<b>15</b>	<input checked="" type="checkbox"/>
Includes <b>at least one</b> locomotion method (teleportation or continuous movement).	3	<input checked="" type="checkbox"/>
Locomotion is <b>smooth</b> and comfortable (no unnecessary motion sickness effects).	3	<input checked="" type="checkbox"/>
Players can move and explore the environment <b>without getting stuck</b> .	3	<input checked="" type="checkbox"/>
<b>Adjustable movement settings</b> (e.g., speed, snap-turn options).	3	<input checked="" type="checkbox"/>
Proper <b>collision handling</b> for movement restrictions.	3	<input checked="" type="checkbox"/>
<b>Object Interaction System</b>	<b>20</b>	<input checked="" type="checkbox"/>

Objects can be <b>grabbed and released</b> using controllers.	3	
Objects respond correctly to <b>physics interactions</b> (e.g., weight, gravity).	3	
Includes at least <b>one interactive socket or snap point</b> .	3	
Interaction logic ensures objects are <b>placed correctly</b> when required.	3	
Objects provide <b>visual feedback</b> (highlighting, animations) when interacted with.	3	