

**B.Sc. (Hons) in IT – Field of Specialization Interactive Media**  
**2025 - Year 03 – Semester 02**

**SE3091 – Games Technology**  
**Final Project – The Wizard’s Trial - A Hogwarts Adventure**

**Objective** : This final project requires each student to design and develop an individual, story-driven game level in Unreal Engine. The theme is inspired by Hogwarts-style magical adventures, where a wizard-in-training must complete a trial to unlock their first spell and prove readiness.

The project must demonstrate integration of Unreal Engine features covered in laboratory sessions, including landscapes, lighting, fog, particle systems, physics, asset importing, interactivity, scoring systems, and gameplay mechanics.

**Percentage of Overall** : **30%**

**Duration** : **Inform in Due Course**

**Assignment type** : Group (Maximum 3 Members)

**Assignment created by:** Mr. Aruna Ishara Gamage | Mr. Nushkan Nisme

## **Storyline**

The player assumes the role of a wizard-in-training at Hogwarts School of Witchcraft and Wizardry. On the first night at the castle, the student is summoned to attempt the Wizard’s Trial, a magical test designed by the professors to measure skill and courage.

The trial is divided into three zones:

- 1. The Courtyard of Beginnings** – A tutorial area where the player learns basic movement, item collection, and interaction through text or audio hints.
- 2. The Potion Chamber** – A puzzle-based zone in which the player solves interactive challenges (such as activating runes, mixing ingredients, or unlocking levers). Completing this section unlocks the first spell (e.g., *Lumos* to light the way or *Alohomora* to open doors).
- 3. The Altar of Balance** – The final chamber where the unlocked spell must be used to progress, and collected artifacts must be placed on the altar to complete the trial.

The successful completion of the altar challenge signifies mastery of the Wizard’s Trial.

## **Tutorial and Hinting System**

Each project must include a tutorial or guidance system to introduce the player to game controls and mechanics. This can be achieved through:

- On-screen text prompts (e.g., “Press E to interact”).
- Floating magical markers (runes, glowing text).
- Simple voice-overs (optional), simulating guidance from a professor.

The tutorial should gradually introduce core mechanics, such as movement, interaction, collecting items, and unlocking spells.

## **Project Requirements**

### **1. Scoring System**

- A HUD with a visible score counter.
- Points awarded for collecting magical artifacts such as scrolls, potions, or crystal shards.
- Optional: negative scoring for falling into traps or triggering magical hazards.

### **2. Interactivity**

- At least two interactive magical elements, such as:
  - A locked door that opens only after a run is activated.
  - A floating platform or lever puzzle that enables progression.
  - Physics-based interactions (e.g., a rolling cauldron or destructible object).

### **3. Level Design and Layout**

- A Hogwarts-inspired level designed with three distinct connected areas:
  - **Tutorial Courtyard**
  - **Puzzle/Potion Chamber**
  - **Final Altar Chamber**
- The layout should ensure clear progression from start to finish.

### **4. Character Controller and Gameplay Mechanics**

- A third-person wizard character.
- Basic movement: walking, running, jumping.
- Interaction with objects and collection of items.
- A progression system where the player unlocks a spell after completing the puzzle chamber.
- Clear win/lose states (restoring the crystal = win, failure to complete challenges = lose).

## **5. Environment Design and Detailing**

- Hogwarts-inspired fantasy atmosphere achieved through:
  - Atmospheric and exponential height fog.
  - Directional, point, and spot lights.
  - Magical particle effects (fireflies, sparks, spell effects).
- Imported props (castle walls, cauldrons, books, candles, runes) from Unreal Marketplace or Mixamo.

## **Deliverables**

### **1. Playable Unreal Project (packaged build).**

### **2. Design Report (6–8 pages, PDF) including:**

- Storyline.
- Description of zones and spell unlock progression.
- Tutorial/hint system.
- Screenshots of gameplay.
- Mapping laboratory knowledge to implemented features.

### **3. Demo Video (5 minutes) demonstrating:**

- Tutorial system.
- Interactivity and spell unlock.
- Scoring and environment detailing.

Criteria	Exceeding Expectation (20–16)	Meeting Expectation (15–13)	Satisfactory (12–10)	Below Expectation (9–0)	Marks
<b>Zone/Tutorial Design (25%)</b>	The zone/tutorial is fully functional, immersive, and polished with clear guidance (text/voice/magical hints). Flow into the next stage is seamless.	The zone/tutorial introduces controls and objectives clearly but with limited immersion or guidance features.	The zone/tutorial provides only minimal instructions, confusing progression, or poor flow.	The zone/tutorial is missing, non-functional, or unclear.	
<b>Puzzle/Spell Unlock (25%)</b>	Puzzle is creative, multi-step, and immersive. Spell unlock is clear, polished, and tied to visuals/particles.	Puzzle works with some complexity; spell unlock functional and integrated.	Puzzle is simple or repetitive; spell unlock functional but basic.	Puzzle/spell unlock is missing or non-functional.	
<b>Final Trial/Completion (25%)</b>	Altar trial is immersive, requiring spell use + artifact placement, with strong win/lose feedback. Highly polished magical atmosphere.	Altar trial functional with spell use and artifacts but lacks polish or feedback.	Altar trial is basic, with minimal interactivity or unclear completion.	Final trial is incomplete, non-functional, or disconnected from storyline.	
<b>Environment &amp; Detailing (25%)</b>	Environment is highly immersive:  Hogwarts atmosphere with assets, fog, lighting, particles, seamless integration across zones.	Environment has good theme and props, with some use of fog/lighting/particles.	Environment is plain or repetitive; limited use of assets/effects.	Environment is default or incomplete, lacking detailing and atmosphere.	
				<b>TOTAL [100]</b>	