

# Assignment Kingdoms & Quests

Welcome to **"Kingdoms & Quests"**, a fantasy role-playing game where players embark on epic adventures with characters of their own creation. Players can choose from various character classes, each with unique abilities, and complete quests to gain experience, level up, and unlock powerful new skills.

In this game, you are the lead game designer tasked with creating the underlying system that supports character creation, quest selection, and character progression. Your system must be flexible enough to support various character classes and quests while using object-oriented principles like inheritance and abstract classes to keep the design clean and scalable.

There are three types of characters: Warrior, Mage and Archer. Each character has its specific attributes and abilities. All the characters have the ability to attack, defend and use their special ability.

The Warrior special ability is that it (temporary) increases the attack power. The special ability of the Mage is to increase his defend. The special ability of the Archer is to double the damage it's damage it does to an enemy.

A player can see a list of available quests. Each quest offers experience points (XP). In a quest a player is playing against one of the characters. A quest also has a difficulty level. There are also special quests. In special quests the player earns XP AND items. An item just has a title. A player can only play the quest when it has enough XP. Then needed XP is calculated by difficulty times 10.

When a player has enough XP points (200) it can level up.

## ✍ Implement the following

- Create a Use Case diagram.
- Create a class diagram.
- Create the application.