

Cocos Technical Test

This document is 2 pages long.

Scenario

Assume that you are developing an RPG game (e.g. MapleStory, World of Warcraft)
Your task is to create an equipment system for a playable character.

Requirements

- Cocos Creator 3.8.6

Basic Data

- The playable character has the following stats:
 - Health, Mana, Strength, Agility, Intelligence
- Character should have multiple equipment slots such as:
 - Helmet, Armour, Boots
- Stats can be enhanced via equipping of equipment
- Health and Mana can be restored by consuming items

Game Requirements

- Simple inventory system that allows players to select, equip or consume items.
- Basic UI to display health/mana along with its stats like Strength, Agility and Intelligence.
- The playable character should be present but it can just be a simple placeholder. The character can be interacted with to have its HP and Mana affected so that we can consume items to restore them.

Required UI Feedback

- Upon a stat update, display UI feedback (e.g. changing the stats amount text)
- Upon equipping items, display VFX feedback (e.g. a simple white flash showing which equipment slot has been updated).
- When hovering over items, a tooltip UI should show up and display their stats.

- Additional UI feedback (VFX, animation) is encouraged, but not required.

Implementation Notes

- The game should be built as a Web Mobile game.
- It is recommended to use Resources or Asset Bundle to store and load data. Amending the data in those resource items should result in changes once the game launches.
- As for the character interaction behaviour, you may just keep it simple by:
 - Providing buttons to “damage” the player or “spell” button to consume mana from the player (provide access to set damage or mana values on the inspector) QR
 - Providing a button that performs random changes to the stats of the player
- Usage of prefabs is highly recommended, they should be reusable and/or composable.
- UI should fit most aspect ratios (16:9, 16:10, 19.5:9 etc) and screen sizes.
- You are encouraged to use libraries to help with your implementation.
- Publicly available art assets can be used in this test.
 - It is also fine to just show placeholder assets as long as there is a way to differentiate their nature in UI.

Additional Notes

Although a strong demonstration of gameplay programming is appreciated, your primary focus should be on data management and UI implementation for this technical test.

Feel free to go beyond the basic requirements and express your creativity and demonstrate your capabilities.