Description:

To develop a game with mechanics similar to Big 2 (Capsa) card games. See this link for Capsa gameplay: https://play.google.com/store/apps/details?id=com.yepplay.capsasusun

Scope:

• All common Big 2 rules are well implemented.
• Can choose a character at the beginning. Character avatars can change depending on the game condition during gameplay. For example, when winning the character is smiling, while when losing the character looks sad / angry.
• 2D / 3D choice is purely optional. Priority is on the gameplay aspect of the game, not graphics quality. Using any 3rd party graphic & sound assets are OK.
• As the game is 4 players, the other 3 players would be run by AI.
• Can use any framework / plugins in Unity to ease the development process. But MUST NOT use any Big 2 game templates.

Assessment Criteria:

• Use of pooling for spawned objects.
• Finite State Machine to control player state (e.g. start, running, die) and game state (e.g. ready, game run, game end).
• Demonstrates usage of common Design Pattern (singleton, factory, observer, etc.).
• Basic AI design.
• Collision / colliders if necessary.
• C# Event and Delegate usage inside the game. Or even better, show usage of UniRX / Reactive programming.
• Correct usage of coroutine.
• Dependency Injection / Entity Component System implementation.
• Usage of UI framework (Unity UI or other framework is OK).
• Git as source control.
• Assets and performance optimization.

Delivering:

● Deadline for test: **7 days**