Project

Brief:

The goal is to create a card game that blends the mechanics of a versus fighting game with the strategic depth of traditional card games like *Hearthstone* or *Magic: The Gathering*. The game will include a strategic layer driven by economic management.

In essence, players must constantly decide between boosting their economy to play stronger cards or investing resources into their cards to win battles. This unique mechanic adds an additional layer of complexity, requiring adaptability. Visually, players with a strong economy will be easily recognizable, allowing opponents to scout their progress.

Combat System:

Players will face three opponents, fighting them one at a time until either they run out of health or their opponents do. The combat system takes inspiration from modes like TFT (*Teamfight Tactics*) in *League of Legends* and battle royale mechanics seen in various card games.

Constraints:

Week 1:

Each player places their cards on a grid consisting of X rows and Y columns. Card positioning is crucial, as it can enable or disable certain card abilities.

(X and Y must be configurable)

Week 2:

You must be able to understand, or guess that a player is playing an economic or aggressive game. Also, you must be able to "scout" all players and determine if they have a strong or weak economy.

Week 3:

You must implement 3 mandatory effects which can be on some cards :
- *Revive* : When the card is killed, it revives ;
- *Absorbe* : The card totally ignore the first damage received ;
- *Relentless* : When a card attack, it attacks 2 times ;

Week 4:

You must integrate an event system. At some point during a game, an event can popup for each player, offering to either boost up economy playstyle or aggressive play style.

Week 5:

In each game, there are some special cards named "Champions". They are unique and very strong. Only 1 instance of each champion exists for a game. If a champion has been picked by someone, no other player can have it.

Week 6:

Every player must be able to forfeit -> leave the current match, and ensure the game state will be functional.

Week 7:

Give your project a name

Unit tests :
- Card take damage ;
- Card do damage ;
- Card can revive ;
- Card can attack two times (relentless) ;
- Card can block 1st damage ;

Scoring Criteria:

- **Base Points**
  - **Phase 1 completion** : 1 point
  - **Phase 2 completion** : 1 point
  - **Working build** : 1 point
  - **Unit tests** : 2 points
  - **GitHub usage (regular commits with meaningful messages)** : 1 point
  - **Data-driven approach** : 2 points
  - **Workflow management (game entry/exit, win/loss states, etc...)**: 2 points
  - **Economy management** : 5 points
  - **Card management** : 5 points

Bonus Points:

- **Audio integration**: 1.5 points
- **AI opponent integration**: 4 points

Rewards:

- **Most Beautiful Game:** 1 point
- **Most Innovative Game:** 1 point
- **Most Immersive Interface:** 1 point
- **Most Addictive Gameplay:** 1 point

Note: Rewards do not count toward the final score. A group can achieve a perfect score of 20/20 without rewards. Each group will vote for another team in each reward category.