

**Please read carefully all the document before starting**

## Purpose

The intention behind this project is to streamline the process for both parties involved. By completing this task, you'll gain insight into our expectations for potential team members. This also allows us to dedicate more time to candidates who are genuinely interested in collaborating with us. This is not a speedrun, so please make good use of the allotted time.

## Project Details

For this project, we are requesting a functional prototype of a card-match game (here is an example of the gameplay [https://www.youtube.com/watch?v=L7VF\\_MqUqis](https://www.youtube.com/watch?v=L7VF_MqUqis) ). The prototype should fulfill the following criteria:

1. Develop **from scratch** using **Unity 2021 LTS** or **Cocos Creator 3.8** (avoid prebuilt frameworks or purchased assets).
2. Ensure smooth gameplay with animations for card flipping and matching. The system should allow continuous card flipping without requiring users to wait for card comparisons to finish before selecting additional cards.
3. Support various card layouts, such as 2x2, 3x3, 5x6, etc. The cards should scale to fit the target display area, whether it's the screen or another container widget.
4. Implement a save/load system to persist progress between game restarts.
5. Include a scoring mechanism.
6. Integrate basic sound effects for card flipping, matching, mismatching, and game over (limited to these four scenarios).
7. Using git is a must, and try to commit frequently and have meaningful messages, as if you're working in a team. The git repo will be created by you, as a public repo, with a randomly obscure name that doesn't disclose anything about the card-matching game. We hope that this measure will prevent anyone leveraging your code post-submission and gaining an unfair advantage. The commit messages on github will be used when reviewing the code. The first commit must be an empty Unity project and marked the start of your working process, don't bother uploading a fully functional code as your first commit.

## Scope

1. Focus solely on gameplay; a menu system is optional, though beneficial.
2. Mandatory inclusion of a scoring system; a combo system would be advantageous.
3. Ensure that there are no crashes, errors, or warnings.
4. Can run on desktop and either Android or iOS platforms.

5. Since this is a rather simple game, we'd like to focus more on the code, rather than the visuals. So do your best in optimizing the game, show us your skill.

## Time limit

2 days, or 16 work-hours, from the time you receive the document + 8 hours, and ended when we received your github link via email. When you receive the document, please create a new github repository with an empty readme file, this will be marked as your start time.

If you have any inquiries or need further clarification, please don't hesitate to ask. We're looking forward to seeing your prototype and evaluating your skills.

In this project, we prioritize requirement > quality of code > additional feature > visual