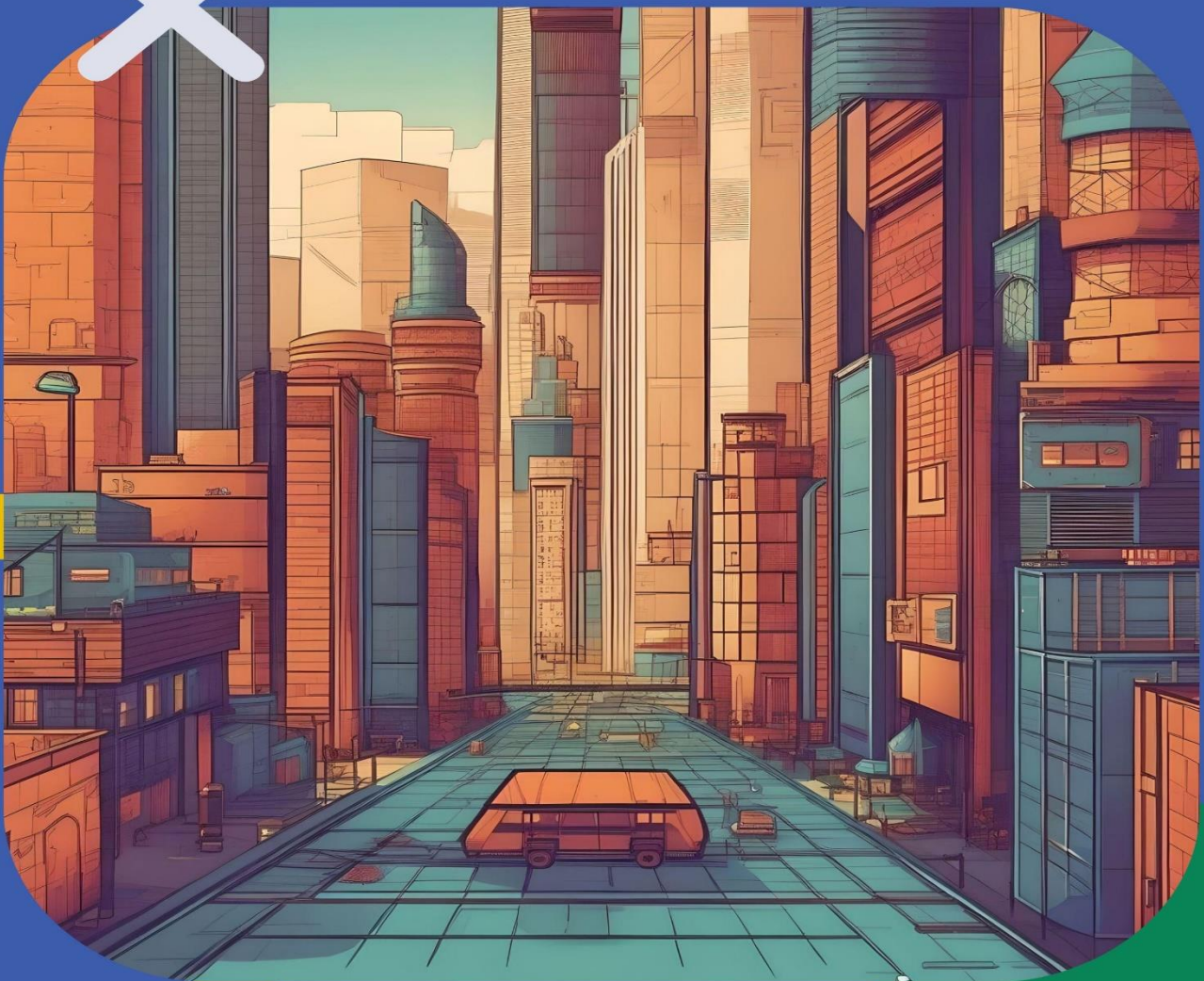




# CODERS CUP

Manuel



## Coders Cup competition (Manuel)



It is an annual game design competition aimed to challenge students to program a game with a certain standard, which will challenge their creativity and curiosity to learn and master programming.

Every year will be a different theme for the competition.

### Time Line:

- **15/12:** Competition Overview.
- **8/1:** Theme reveals.
- **20/2:** Sending Deliver Link.
- **25/2:** Start Deliver the Codes.
- **1/3:** End Deliver the Codes.
- **8/3:** Competition day.



## Categories:

- **Entry-level** (Kudo)
  - **Intermediate** (Scratch - Pictoblox)
  - **Senior** (Unity game engine - MIT app inventor - Gamemaker Studio)
  - **Principal** (Python - Flutter)
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## Competition Phases:

The competition will be divided into 2 phases

- **Phase 1** (Before Competition Phase)
  - **Phase 2** (On-Competition Phase)
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### Before Competition Phase:

This Phase will start from the beginning of registration, it will review the constate progress for each team, and the final Code Review before competition. (Review Scoring Guide for more details) (50 Point)

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### On-Competition Phase

This Phase will start on the competition day, and it will consist from two different parts. **(250 Point)**

- Section 1 **(Pre-made Project) (150 Point)**
    - The teams will showcase their project to a panel of judges, delivering a presentation that highlights the key aspects of their code.
  - Section 2 **(On spot tasks) (100 Point)**
    - Section 1: A - Easy Task (to be delivered in 30 minutes) **(50 point)**
    - Section 2: A+ - Medium Task (to be delivered in 45 minutes) **(30 Point)**
    - Section 3: A++ - Difficult Task (to be delivered in 1 hour) **(20 Point)**
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## On spot tasks

### Easy Task:

In the first phase of the coding challenge, teams will be presented with an easy task that needs to be completed within a time limit of 30 minutes. This task is designed to assess the team's ability to solve a moderately challenging problem efficiently and effectively. The objective is to test their fundamental coding skills and problem-solving capabilities within a constrained timeframe. The easy task may involve implementing a specific algorithm, solving a mathematical problem, or writing a piece of code to address a given scenario. The teams will be expected to use their programming knowledge and logical reasoning to come up with an accurate and optimized solution. Attention to detail, code readability, and adherence to coding best practices will also be evaluated.

### Medium Task:

Moving on to the second phase, teams will face a medium task that requires a slightly higher level of complexity and problem-solving skills compared to the previous phase. The time limit for this task is extended to 45 minutes, allowing teams to tackle a more intricate challenge. The medium task will test the team's ability to handle more complex algorithms, data structures, or programming concepts. It may involve tasks such as implementing a sorting algorithm, designing a database schema, or creating a more sophisticated program with multiple functionalities. The teams will need to demonstrate their ability to analyze the problem, devise an efficient solution, and implement it correctly within the given timeframe.

### Difficult Task:

In the final phase, teams will encounter a difficult task that pushes their coding skills to the limit. This task is intended to challenge their problem-solving abilities, critical thinking, and familiarity with advanced programming concepts. Teams will have a time limit of 1 hour to complete this task. The difficult task may involve complex algorithmic problems, intricate data manipulations, or advanced system design challenges. It will require teams to think creatively, develop robust solutions, and handle potential edge cases. The evaluation will focus on the team's ability to tackle complex problems, write efficient code, and demonstrate strong understanding of advanced programming concepts.

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## NOTE:

Throughout all phases of the coding challenge, teams will be assessed based on factors such as code correctness, efficiency, scalability, readability, and adherence to coding standards. The ability to work collaboratively, communicate effectively, and manage time efficiently will also be considered. The goal is to identify teams that exhibit strong problem-solving skills, technical expertise, and the ability to deliver high-quality solutions within specified time constraints.



## General Rules

- The team may consist of up-to **4 team members**.
- Participants will try to market and sell their games, the game with the best marketing plan, strategy, and user experience will win the championship.
- Participants will be evaluated on many aspects and can win several prizes depending on their performance. (best game design, best programming, best strategy, best idea, best marketing plan, best user experience, judging award, and most voted)
- Commercial Video: **(2-3 minutes)**
  - This video should show the graphics of the game with voice over of the participants creatively explaining their game. (the video will be posted on the competition's social media channels for voting, which will give the team bonus points)
    - Movie maker is the suggested software, due to its simplicity for the participants.
    - Adult help is accepted as long as the majority of the work is done by the participants.
- GDD (Game design document): A template will be sent, participants can either edit it or design their own GDD with the same required data.
- The delivered game **MUST** be the same one presented in the competition day.

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### Note:

Competition will provide the following files:

- Competition General Manuel.
- Competition Categories Manuels.
- Competition Score Sheet.
- Competition Theme details.
- GDD Template.