

COP290: Design Practices

Assignment 2 Subtask 2

Due Date: 18th April 2024 7:00 PM

Goal

Game development offers a powerful platform to advocate for causes that matter to us. As part of this task, you'll design and develop a game centered around a cause you deeply care about. Here's how to approach it -

Choose your Cause

The 170+ odd students in COP290 class are a heterogeneous bunch, based on what bothers them about the current world (other than too many courses and assignment load, the next foreign university or industry internship, bad mess food etc. that bug you everyday). Reflect on issues that you personally care about, such as mental health, environmental sustainability, elderly care, political accountability, or religious tolerance intolerance etc. Discuss with your teammate to align on a cause that both of you are passionate about.

Gamify your Cause

Determine how to integrate your cause into the gameplay effectively. Consider how the game mechanics, narrative, and objectives can subtly educate players about the cause while keeping them engaged. If your preferred cause seems challenging to gamify, you can explore other alternatives that are more feasible.

The levels in the games, the scoring options for the players, the data and states that need to be maintained or communicated across players or a player and a server, single player or multi player game, need careful thinking.

Multi-player games might be more fun as natural competitiveness of humans creates easier incentives to continue playing. However, if your game is for a shy adolescent coping with anxiety issues, he or she might not be comfortable to share those insecurities with another person. Or maybe its actually the opposite,

he is trying to reach out to someone and a two or multi-player game is a perfect way for him to make the other players aware of his mental state. Think carefully of the appropriate modality. Or have both versions in the game, where people can choose between the single and multi-player versions.

Define your target audience

Identify the demographic that your game will cater to, whether it's children, teenagers, adults, or the elderly. Game's design and user interface should suit the needs and preferences of your target audience. For example, not too much violence for children, slower and bigger UI elements for elderlies.

Choose Your Programming Language and Platform

C++ or Java or Python or Django or Android or ...? Select the programming language and platform that align with your team's skills and project requirements. Consider factors such as performance, scalability, and accessibility. Determine whether your game will be developed for mobile, web, or desktop platforms, and whether it will be 2D or 3D. We cannot give you any hardware support like Android or iOS phones or AR/VR gears, but feel free to use any specialized hardware that you might already have. Or stick to your laptops, that's perfectly good.

Submission Details

1. This assignment can be done in teams of atmost 2 students. You should setup your repository on Github, and make frequent commits. You can make the last commit by 18th April, 7:00 PM.
2. Don't make the repo public. Add the TA user account(shared earlier) to your repo.
3. On Moodle, you should only submit one screenshot of the latest commit history (Moodle doesn't allow png submissions, so you should zip and submit).
4. Your repository should contain the entire source code. Also upload a presentation (not more than 15 slides) containing following details
 - Describing the above design choices, and additional ones that are relevant for you.
 - Also describe the implementation highlights: the UI (put some screenshots or a small screencast), whatever storage and communication elements are needed, whether you used some existing framework(s) or built everything from scratch.

- Describe a set of metrics by which we should evaluate your particular game design and implementation. Some of you might have very sophisticated game logic, some might have some non-trivial scoring mechanisms, some might have the most dazzling UI, some others have zero latency and great responsiveness. List all metrics that you think matter for your game, and say what trade-offs you had to do among those metrics (possibly due to lack of time, you couldn't optimize everything and traded some metrics for others).

5. Evaluation will be done through demos in the week following the deadline.

Some links to help you start

- [Games for Social Good](#)
- [Some example games](#)
- Mental health cause based games - [example1](#), [example2](#), [example3](#)
- Games based on elderly issues - [example1](#)
- Games based on climate issues - [example1](#), [example2](#), [example3](#)

You could also consider something completely different and out-of-the-box. For example - you could present a virtual tour for the IITD campus! Have a look at [example1](#) and [example2](#) for cool experiences.