**Course:** CMPT 276

**Group member:**

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1. **Master Plans:**

1st stage – interviewing phase:

* Collect customers’ requirements
* Review and clarify requirements with customers

2nd stage – planning phase:

* Convert customers’ requirements into the design – UML diagrams
* Review the design within teams
* Propose and review the design of the game with the customer
* Create a tactical plan for the next stage – the coding phase includes:
  + Assign task and workload for each member
  + Establish a timeline for the coding phase
  + Schedule the meeting plan – Biweekly meeting:
    - Review and report the tactical plan for the last period
    - Establish the strategic plan for the next period

3rd stage – coding phase:

* Follow the tactical plan for each period (every two weeks):
  + Assign tasks for each team member
  + Submit the biweekly report at the end of the duration
  + Coding and testing
* Review and adjust the plan to appropriate with the current situation

4th stage – testing phase:

* Release a beta version
* Review and debug
* Release the final version of the game

1. **Project Description:**

The team develops an arcade-2D style game named “Tony In need of Pennies” or “TIP.” In this game, the main character, called “Tony” has received a positive test of COVID-19, so he needs to travel around the city to collect as many “Pennies” as possible to pay for the vaccine to save himself.

While searching for “Pennies”, he might encounter “COVID viruses,” which wander around corners of the city. If Tony is in range of the virus’s radar, they will chase him until he is out of their detection radius. Furthermore, Tony also needs to avoid banana peels on the ground. If he moves over a banana peel, he will “slip and fall” and lose some Pennies. Tony can double his fortune by collecting a special bonus. Tony must reach the minimum fund to open the gate for the next round before the time ends. He can either stay to gain more money or enter the door.

The game has three rounds, and each round lasts 3 minutes for Tony to accumulate his budget. At the end of the game, Tony visits the hospital to purchase a portion of the vaccine to save himself. There are 5 type of vaccines, and the cost of each depends on the fatality rate of that kind. The player wins if Tony survives after receiving the vaccine and loses otherwise.