

Computer Science 12 - ICS4U**Stage 0 – Intro to Course Culminating Task (CCT)**

You will be write a text-based game for KevinVision Gaming, a start-up gaming company. Kevin Wong, the CEO of the company hired you to help develop a game.

Card Games	Grid Game	Your choice	Not Approved Games
<ul style="list-style-type: none"> • Hearts • Uno • Big Two • Monopoly Deal • GoFish 	<ul style="list-style-type: none"> • Battleship • Chess • Jungle • Ludo (Need Mod) 	(Must show me the game for approval.)	<ul style="list-style-type: none"> • Black-Jack • Snake & Ladder • Tic-Tac-Toe • ConnectFour • Text-Based RPG

Note 1: No 2 teams will have the same game.

Note 2: Pick top 3 choices, and will have a random draw to decide who gets their game.

This is a group project, with two people. There's 3 parts to the CCT:

1. **Documentation** (Game Rules and UML)
2. **Presentation** (Power Point)
3. **Program** (Code)

1. Documentation Requirements:

- Include explanation of the game rules (1-2 pages)
- Include all drafts and final UML diagram.
 - Final UML must indicate who is responsible for what methods/classes.
- Explain where did you include Inheritance, Encapsulation and Polymorphism.

2. Presentation Requirements:

- Create a PowerPoint (PPT)
- Include a section to briefly explain the game rules.
- Include a section to show all versions of the UML.
- Teacher will ask each member questions (minimum of 3) regarding the game/code.
- Play the game with teacher.
- 45 minutes time limit.

3. Program Requirements:

- Must use Methods, Objects, Classes (Unit 1 & 2).
- Must use Object Oriented Programming conventions (Unit 3)
- Polymorphism must NOT be used for displaying only. Must be related to game rules (either points or calculations related)
- Must use primitive arrays (Unit 4).
 - **Note:** Not allow to use **ArrayList**, **LinkedList** and etc. (Things not taught in the course)

Program & Documentation Due Date:	<p>_____ (11:59pm)</p> <p>Must put all code and documentation file in the <u>team leader CCT</u> folder</p>
Presentation Date :	<u>During Exam week.</u> To be scheduled later.

What to do:

	Item	Description	Stage
1	Intro to CCT & forming teams	<ul style="list-style-type: none"> Find a partner and think of a game. Go online and find a game that both members know how to play. 	0 (Week 1)
2	Plan and Brain Storm	<ul style="list-style-type: none"> Discusses with teammate and consult with teacher to get confirmation on the game. Propose why the rules of the game will satisfy the CCT requirements. Needs teacher approval 	1 (Week 3)
3	Planning and Design	<ul style="list-style-type: none"> Design the program by creating a UML. Apply OOP concepts. Split the workload (methods) between team members. Each person in the group must have an equal number of methods to work on. Write your name on top of your method (in a comment) that you are working on Checkpoint 1 – UML 1st Draft. Marked 	2 (Week 5)
4	Development	<ul style="list-style-type: none"> Write the program and continuously test it. Must write a comment at the top of the class (file) to indicate the programmer's name. If program must be redesigned, then get teacher's approval and adjust the UML. Checkpoint 2 – Must be able to show progress. Marked 	3 (Week 6 – 7)
5	Testing Program	<ul style="list-style-type: none"> Test your program and ensure there are no bugs. May ask friends to play the game. Checkpoint 3 – Must be able to show progress. Marked 	4 (Week 8)
6	Finalize Program (Due)	<ul style="list-style-type: none"> Wrap up code Submit the program Submit the documentation 	5 (Week 9)
7	Prepare for Presentation	<ul style="list-style-type: none"> Revise the program and make sure the UML diagram reflects that. Keep all versions of the UML in your final product, so teachers could see the changes made throughout the development cycle. Also create a PPT to showcase program. 	Exam Week (Presentation Day)

Mark Distribution:

Item	Description	Marks
Program code	All the Java code of the game. <ul style="list-style-type: none"> Marked individually 	10 %
Documentation	A word document or PDF, explaining everything about the game and code. <ul style="list-style-type: none"> Marked as a group 	5 %
Presentation	Schedule a meeting with Mr. Kevin during exam period to show off the game and explain the code to him. If you can't answer, then it means you will lose marks in the Program Code section. <ul style="list-style-type: none"> Marked individually 	10 %
Playable game	Is it playable and workable? Does it follow the game rules? <ul style="list-style-type: none"> Marked as a group. 	5 %
	Total:	30 %