

CMPT 355 – Introduction to AI
Final Project – The game of Apples to Apples

Due:

- **Presentations – April 3rd during labs**
- **Final report and code – March 31st, by midnight**
- **Participation form - March 31st, by midnight**
- **Demo of a rudimentary functioning application – March 13th during the lab**
- **Final Project proposal – February 4th, by midnight**

Weight: 35 % of the final mark

Type: Electronic

Work: Team project (each team has 3 or 4 students)

NOTE: After reviewing the reports, I may select some of them for further investigation and refinement with the purpose of submitting them to the 15th Symposium on Educational Advances in Artificial Intelligence associated with the 39th annual conference of AAAI to be held in Philadelphia in February 2025.

Objectives:

- Implement an Apples to Apples playing agent.
- Write a proposal to explain your approach to solving the problem – no longer than three pages.
- Demo a functioning application – provided with a green apple (adjective), the agent plays a “rational” red apple (noun) card.
- Write a scientific report of up to eight pages to describe your implementation.
- Prepare (and submit) a 20-30 minute presentation of your work.

Submission information:

- All reports, must be submitted as PDF files using Moodle/Meskanas.
- Submit an archive file containing the code of your agent implementation using Moodle/Meskanas.
 - The implementation must be well documented. In the archive file, use a **proper directory arrangement** and **have a make file** and **readme.txt** file about the directory structure and how to compile/execute your code. Your code must compile and execute on the **students** server.
- The archive file must be submitted electronically using Moodle/Meskanas.
- Fill in the team participation Google form.

NOTE: Properly acknowledge (add a note and/or hyperlink and/or comment) any help or resource you used.

Marking scheme:

Component	Mark
Implementation	20
Performance – how well the agent plays	10
Initial Proposal	7
Demo of functioning application	8
Scientific Report	35
Presentation	15
Compliant submission – functional archive, make, readme file	3
Participation form	2
TOTAL	100

Individual marks: Your marks will have two components: a group component – worth 25% of your project mark and an individual component – worth 75% of your project mark. The group component is based on the submitted project mark. The individual component is based on the work split evaluation - which every student must submit.

NOTE: No mark can exceed 100.

Description: Please visit https://en.wikipedia.org/wiki/Apples_to_Apples for a description of the game. This link provides a short video which further explains the rules: <https://libguides.whitworth.edu/games/applestoapples>. Here https://service.mattel.com/instruction_sheets/T5933-0920.pdf you can find a copy of the original game instructions.

You must design an agent that can play the game and assume the role of a regular player as well as that of a judge.

More information will be released as the term progresses.