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Introduction to Computational Problem Solving
CS167-C

Final Project Proposal: “Bagels Revolution”

I will be doing this project on my own.

This project will be a text-based game called “Bagels Revolution.” It is based on the game Bagels set in a modern revolutionary narrative. The player will play a series of 3 games of Bagels against progressively more challenging A.I. opponents.

It will include 4 classes (names subject to improvement):

The player will choose one of two characters to play as, each with its own class:

BillionaireClass

If the player chooses to play as “A Billionaire Mucky-Muck,” an instance of this class will be generated and will include several accessor methods corresponding to narrative text displayed when each of the 3 games of Bagels is won or lost, as well as descriptive text of each of the three opponents.

RebelClass

If the player chooses to play as “A Swarm of Angry Protestors,” an instance of this class will be generated, and, similar to BillionaireClass, will include several accessor methods corresponding to narrative text displayed when each of the 3 games of Bagels is won or lost, as well as descriptive text of each of the three opponents.

GameOfBagels

This will be called to generate the game itself. It will include “Attacker” and “Defender” functions for when the player or the A.I. is guessing the number. If there is the time for proper development, the player will need to input “Bagels”/”Pico”/”Fermi” correctly when the A.I. guesses a

number. If the player inputs it incorrectly, the player will have “lied.” The narrative text will always note this, and for higher level A.I. the player may lose a point for doing so. If the player loses a game, they will be able to start the level over again or quit. It will also include functions to access rules, help text, and to quit the game.

OpponentBrain

This will create a given A.I. model with different levels of difficulty. These might progress from the A.I. guessing the number in a static number of turns (like hangman) to an A.I. that responds in more advanced ways to “Bagels,” “Pico,” and “Fermi.” It will require mutator functions to keep track of guesses and hints.