CPSC 233: Introduction to Computer Science for Computer Science Majors II

Project – Demo 3 Guidelines

Weight: 10%

Demo grading points

- Add GUI to previous project. Program is now JavaFX event-driven object-oriented GUI (25)
    - Program is launched from main() but main() mostly just launches GUI Scene
    - Have a sketch of planned GUI (this doesn't have to be your final result but what you started to try and make) (5)
    - Has well developed .fxml created in SceneBuilder (5)
    - Has JavaFX Controller event-driven design pattern (5)
    - Has working options to trigger add data menu commands (5)
    - Can view all data (1)
    - Can view 4 special options (4)
- Text menu options all exists although are now in GUI and program data is OO (10)
    - Has at least same complexity
    - Can still view all the stored data as well as the other 4 features
- Save/load data to file still exists (but save/load triggered as GUI menu options) (5)
    - Program should have GUI menu option which will save data to a (comma separate value) .csv file
    - Program should have GUI menu option which will load data from a (comma separate value) .csv file
    - Program should be able to be run with command line argument that will start program using previous data saved to a (comma separate value) .csv file
- Gitlab Usage (out of 5)
    - Gitlab account exists, private project exists, at least 1 commit, small commits, regular commits
- Style/Commenting (out of 5)
    - Name/Date/Tutorial, Functions commented, Javadoc, Inline commenting, doesn't use inline conditionals, limited magic numbers, don't change function names, don't change filenames, etc.
- Partnership penalties
    - During the demo the TA will at times ask different members of your group (partnership) to describe how something works. Each partner should expect to have contributed to unit testing, git commits, commenting, and program functionality. In general, the penalties will be
        - -5 Partner is judged to have not contributed in one area (ex. javafx, git, commenting, code)
        - -10 Partner didn't contribute in two areas

When 12-year-old Percy Jackson learns that his true father is Poseidon, the Greek god of the sea, he undertakes a dangerous quest across the United States to retrieve a stolen lightning bolt and stop a war between the gods. *The Lightning Thief* provides a high-interest, humorous introduction to the Greek myths. It encourages young readers to explore elements of the classical hero's quest rendered in a modern-day setting, and to discuss such relevant issues as learning disabilities, the nature of family, and themes of loyalty, friendship and faith.

Contents

7. Annabeth is the daughter of Athena, the goddess of wisdom and warfare. Read the description of Athena in this guide. Look at some of the myths about Athena, including the stories of Arachne, Medusa, and the founding of Athens. How is Annabeth like her mother? Does anything about Annabeth's character strike you as *unlike* Athena?

8. After Percy learns he is a half-blood, he wonders who his own father is. He also learns that some half-bloods never find out. He says, "I thought about some of the kids I'd seen in the Hermes cabin—teenagers who looked sullen and depressed, like they were waiting for a call that would never come. I'd known kids like that at Yancy Academy, shuffled off to boarding school by rich parents who didn't have the time to deal with them. But gods should behave better." How would you feel if you were in Percy's place? Would it be easier to believe your father was dead, or to know that he was alive but not communicating with you?

9. When Percy finally learns the truth that he is the son of Poseidon, are you surprised? What hints are dropped before the revelation? How does Percy's personality fit/not fit the god Poseidon?

10. Throughout the book, humor is used to counterbalance the serious situations Percy faces. For instance, the Minotaur wears white Fruit-of-the-Loom underwear, and Percy wants to tell the mummified Oracle, "thanks, wrong door, just looking for the bathroom." What's your reaction to the book's humor? Does it seem appropriate for a sixth-grade narrator? Does it change your perception of the mythology?

11. When describing the effects of Mist, Chiron says, "Remarkable, really, the lengths humans will go to fit things into their version of reality." How is this true in the novel? In Greek mythology? In real life?

12. Medusa tempts Percy to stay with her as a statue. She warns him that he is simply a pawn of the gods. Does Percy seem like a pawn? Why or why not? If you were given Percy's quest, would you undertake it or would you rebel?

- -15 partner didn't contribute in three areas
- -20 partner didn't contribute in all four areas
  - Contribution penalties are recorded separately for each student. Judgement is made by TA on basis of students being able to explain something about part of code that is being viewed in more detail than just re-iterating the readable syntax.

Example program. I decide to make a CWHL (ice hockey) statistics tracking program.

Previous menu options listed (These will now be integrated into a GUI window instead of a text menu interface)

Track basic data

1. add a Team (could either design this as a set of textfields and a button in main window, or as a popup window for data entry)
2. add a player to a team with a name, birthdate, position, and jersey number (could either design this as a set of textfields and a button in main window, or as a popup window for data entry)

Add additional data

3. add a goal to a player (take in team/player text and use button to add goal)
4. add an assist to a player (take in team/player text and use button to add assist)
5. add a save to a goalie (take in team/player text and use button to add save)
6. add a shot on goal to a goalie (take in team/player text and use button to add shot)

Output General

7. ask for all players to be printed (click button and show in center window, this will be default view and updated after each player is added)

Output Special

8. ask for the top 5 goal scorers (click button and show in center window or popup window)
9. ask for the top goalie in save percentage (click button and show in center window or popup window)
10. recommend line up of 2 defenceman, 1 goalie, and 3 forwards based on being top players (click button and show in center window or popup window)
11. list of players over a certain age (click button and show in center window or popup window)

File I/O (top bar menu options)

12. About
13. Save data
14. Load data
15. Quit

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Confidentiality Status

Product Status

The information in this document is Final, that is for a developed product.

Web Address

www.arm.com

THE LIGHTNING THIEF
Percy Jackson and the Olympians, Book One
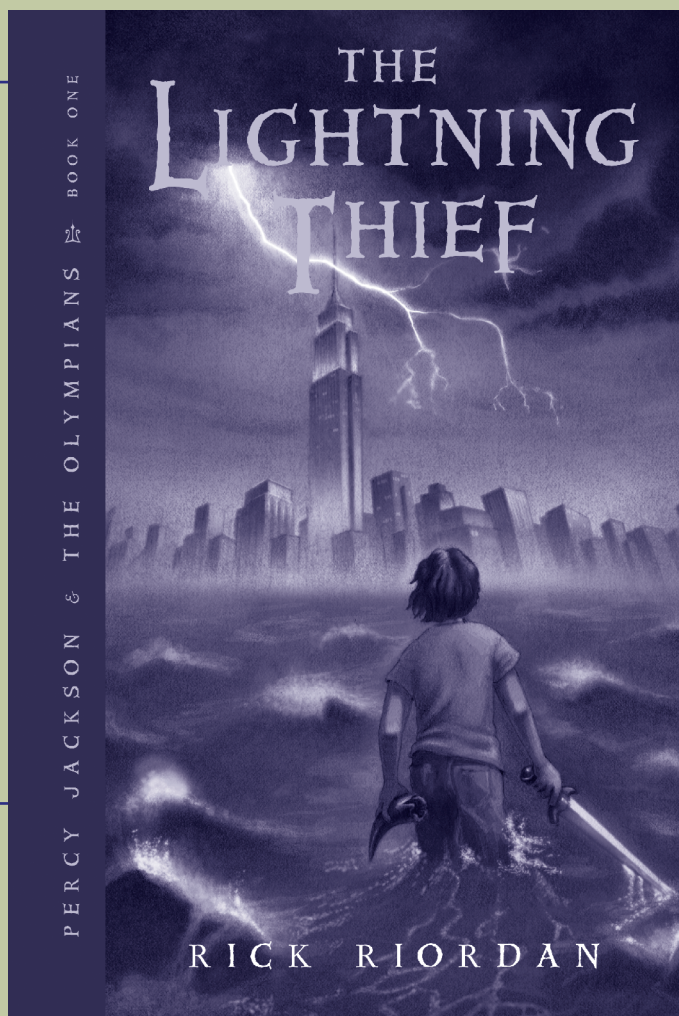
By Rick Riordan

Dryads: Female spirits of nature that live in trees or forests.

Procrustes: "The Stretcher." This giant challenged Theseus on his way to Athens. He made each guest lie on a bed. If the guest was too short, Procrustes would stretch him to fit. If the guest was too long, Procrustes would cut off whatever hung off the bed.

Echidna: The mate of the horrible monster Typhon, Echidna was half-woman, half-serpent. She had many monstrous children, which Zeus allowed to live as a challenge to future heroes. Her offspring included Cerberus, the Nemean Lion, and the Chimera.

Chimera: The Chimera was one monstrous offspring of Echidna. It had the body of a goat, the head of a lion, and the tail of a serpent. It terrorized Asia Minor until it was killed by the hero Bellerophon.

Lotus Eaters: On his way back from the Trojan War, Odysseus encountered the Land of the Lotus Eaters, where the inhabitants lived in perfect contentment doing nothing but eating lotuses all day. This lazy lifestyle was dangerous because it tempted Odysseus's sailors to forget about their journey and remain on the island.

1. Percy has been diagnosed with ADHD (attention deficit hyperactivity disorder). The main traits of ADHD are inattention, hyperactivity, and impulsivity. The ADHD child often has trouble keeping his mind on one thing and organizing a task. He feels restless and fidgety. He may blurt out comments or act without thinking. Does this profile fit Percy? Discuss how Percy does/does not seem like an ADHD child.

2. Percy says, "Mr. Brunner expected me to be as good as everybody else, despite the fact I had dyslexia and I had never made above a C- in my life. No—he didn't expect me to be as good. He expected me to be better." What do you think of Mr. Brunner as a teacher?

3. When describing his mother, Percy says, "She's the best person in the world, which just proves my theory that the best people get the rottenest luck." How does this apply to Percy's mom? Is this theory true in life? In the Greek myths?

4. Percy gets exasperated with his mother because she puts up with Smelly Gabe, yet he is proud of her because "she did have a rebellious streak, like me." Do you find Sally Jackson a strong character? Does she stand up for herself? For her son?

5. Percy's first encounter with an Olympian god is Mr. D, Dionysus. Initially, Percy has a hard time believing Mr. D is immortal. What is your reaction to the way Dionysus is portrayed in the book? The Greek gods have very human traits—would this make them easier or harder to believe in?

6. Chiron describes Western Civilization as "a living force. A collective consciousness that has burned bright for thousands of years." He says the Greek gods are part of this, and move around as different nations become the central power of Western Civilization—Greece, Rome, Germany, France, England, the United States. What do you think of this idea? Is "the West" a clearly identifiable cultural force?