Java Foundations Final Project

Overview

The final project gives you an opportunity to showcase your skills with the programming concepts presented in the Java Foundations course. Develop an application, animation, game, or anything else that demonstrates your knowledge of foundational Java programming concepts.

Tasks

Develop an application, animation, game, or anything else that demonstrates your knowledge of foundational Java programming concepts. You may find it helpful to review the Spiral Model of development and design a plan before you begin programming.

Your program must include the following:
- At least 2 classes, not including the test class
  - Encapsulate these, and additional classes
  - Provide at least 2 fields and 2 methods in every class, not including getters or setters.
- An Array or ArrayList
- The ability to accept user-input at least once. Always accept user input without crashing.

You're welcome to base your program on any of the following examples or create your own scenario:
- Animate a wrestling match (Alice IDE)
- Animate a dance routine (Alice IDE)
- Model an employee database. Supply a collection of employees. Provide methods to order or display employees by their salary and productivity ratings. Allow the manager to fire all employees who earn above-average salaries but offer below-average productivity. Allow the manager to hire new employees.
- Develop a meal-planner which assembles a list of food a person can eat in one day based on user-specified calorie limit and an even larger list of every possible food included in the program.
- Create a text choose-your-own-adventure game
- Create a Tic-Tac-Toe game (Noughts and Crosses)

You may use previous problem sets, exercises, or lecture notes as inspiration to help you get started, but your program **must** be significantly different from these materials. For example, you're not allowed to simply change Problem Set 8's soccer league to a cricket league.

Include a document with a brief description of software.