Individual Project
Caro / Gomoku

Department of Software Engineering-FIT-VNU-HCMUS

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Notes

2

Content

In this project, we apply all programming skills in CS161 to implement a simple game.

3

Assignments

Introduction

In this project, you are asked to design and implement a simple and popular game, Caro or Gomoku. Your game is a console app that allows player-player mode and player-computer mode.

Game features

1. Splash screen: a short introduction of your game, must have an animation.
2. Menu screen: allows a user to choose the following option. A user may use arrow keys / mouse to choose / click a menu item
   a. Play in P-P mode
   b. Play in P-C mode, 3 levels: easy, medium, hard. Explain why you think it is a easy level, medium level, hard level.
   c. Load one of saved games: a user may choose one from the list to continue to play or to remove that saved game.
   d. Player statistics: number of played games, number of won games. A user may choose a game and view its gameboard.
3. Options: change player icons (default icons are x and o but a user may change), change at least 8 game rules, change size of gameboard (number of rows and number of columns), turn off/on sound and background music, background image.
4. Undo
5. About us
6. Win animation, lose animation
7. Use Git and Bitbucket as a version control system

What to turn in

1. Source code
2. Executable file
3. Report (at least 5 pages, single pace, 12pt font) that includes:
   a. Project structure.
   b. Data structure.
   c. Any other remarks about your design and implementation

Grading (may be changed later)

1. P-P mode: 15pt
2. P-C mode: 30pt
3. Save a game: 5pt
4. Load a game to continue to game: 10pt
5. Player statistics: 10pt
6. Options: 30pt

<u>Weekly submission</u>

1. Week 05: Splash screen, about screen
2. Week 06: P-P mode (part 1)
3. Week 07: P-P mode, saved game (part 2)
4. Week 08: P-C mode, load game, options
5. Week 09: options
6. Week10: final (oral)

4

In class assignment (A)

5 problems/assignments

5
Homework (H)

All problems/assignments.

NumCompleteProblems = 19