A computer and earth with arrows

Description automatically generated with medium confidence

Cairo University, Faculty of Computers and Artificial Intelligence

**Faculty of computers and AI,   
Cairo University**

**First Semester**

**OOP**

|  |  |
| --- | --- |
| Name | problem |
| Mohammed gamal abdel Nasser  20221119 | 5x5 xo game |
| Mohammed islam Khaled  20220282 | Pyramic xo game |
| Mohammed atef Mouad  20220293 | Four in a row |

**Assignment 3 part 2**

Code Review and Code Quality

Review upon the three problems by the team:

Problem 1(Pyramic tic tac toe)

Requirements:

Have the requirements been met?

-yes

Code Formatting: Is the code formatted correctly?

-yes

Unnecessary whitespace removed?

-yes

Best Practices: Follow Single Responsibility principle?

-The class appears to handle the game logic and display responsibilities. Consider separating these concerns.

Are different errors handled correctly?

-yes

Are errors and warnings logged?

-No, the code does not log errors or warnings.

Magic values avoided?

-Magic values are avoided.

-Comments are present.

Minimal nesting used?

-The code generally avoids excessive nesting, making it relatively readable.

Maintainability: Is the code easy to read?

-yes the code is well documented so it can be read.

Is the code method/class not too long?

-they are moderate.

Performance: Is the code performance acceptable?

-The performance appears to be acceptable.

Architecture: Is it secure/free from risk?

-No security measurements are required for this app

Are separations of concerns followed?

-most of them.

Testing:

Do unit tests pass?

-not provided

Are invalid inputs validated?

-yes

Are inputs sanitized?

-yes , all have been sanitized

Documentation:

Is there sufficient documentation?

-yes

Recommendations:

-more comments

Problem 2(four in a row tic tac toe)

Requirements:

Have the requirements been met?

-yes

Code Formatting: Is the code formatted correctly?

-yes

Unnecessary whitespace removed?

-most of them

Best Practices: Follow Single Responsibility principle?

-the code requires making classes including multiple functions so wasn’t followed

Are different errors handled correctly?

-yes, all of them

Are errors and warnings logged?

-No, the code didn’t contain any errors but had some warnings that didn’t affect it’s functionality.

Magic values avoided?

-Magic values are avoided.

-comments are present but not in all cases

Minimal nesting used?

-The code generally avoids excessive nesting, making it relatively readable.

Maintainability: Is the code easy to read?

-yes the code is well documented so it can be read.

Is the code method/class not too long?

-nope they are fine

Performance: Is the code performance acceptable?

-the code works pretty well.

Architecture: Is it secure/free from risk?

-No security measurements are required for this game

Are invalid inputs validated?

-yes

Are inputs sanitized?

-yes , all have been sanitized

Documentation:

Is there sufficient documentation?

-yes

Recommendations:

-more comments

Problem 3(5x5 tic tac toe)

Requirements:

Have the requirements been met?

-yes

Code Formatting: Is the code formatted correctly?

-yes

Unnecessary whitespace removed?

-yes

Best Practices: Follow Single Responsibility principle?

-The class appears to handle the game logic and display responsibilities. Consider separating these concerns.

Are different errors handled correctly?

-yes

Are errors and warnings logged?

-No, the code does not log errors or warnings.

Magic values avoided?

-Magic values are avoided.

-Comments are present.

Minimal nesting used?

-The code generally avoids excessive nesting, making it relatively readable.

Maintainability: Is the code easy to read?

-yes the code is well documented so it can be read.

Is the code method/class not too long?

-they are moderate.

Performance: Is the code performance acceptable?

-The performance appears to be acceptable.

Architecture: Is it secure/free from risk?

-No security measurements are required for this app

Are separations of concerns followed?

-most of them.

Testing:

Do unit tests pass?

-not provided

Are invalid inputs validated?

-yes

Are inputs sanitized?

-yes , all have been sanitized

Documentation:

Is there sufficient documentation?

-yes

Recommendations:

-more comments