Phase 2 testing plan

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Revised and edited by:

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10. – Introduction

The program to be tested is a full functioning offline version of a Chinese checkers game for Android, with the capability of playing against artificial intelligence. It contains four activities, the first with a button leading to the second, the second activity is a configuration screen for the game you wish to play it contains the options to set the number of players, their names and whether or not a certain player is computer control it then launches the game activity which for the current phase contains a canvas with the game board drawn on it and buttons to confirm a players move and undo a move, the last activity is a help menu where the players would be able to view frequently asked questions and game information.

REVISED VERSION:

The program to be tested is a full functioning offline version of a Chinese checkers game for Android, with the capability of playing against artificial intelligence. It contains four activities. The first activity has a button leading to the second. The second activity is a configuration screen for the game you wish to play. It contains the options to set the number of players, their names and whether or not a certain player is a computer opponent. It then launches the game activity which contains a canvas with the game board drawn on it and buttons to confirm a player’s move and undo a move. The last activity is a help menu which is accessible through the first activity and through the context menu of every activity. The players would be able to view frequently asked questions and game information here.

1. – Objectives

Verify the current phase programming is functional and works consistently.

1. – Testing phases
   1. - Unit testing

* MainActivity
  + offlineActivityConfigurationButton
    - Verify clickabilty
    - Verify visibility
    - Verify proper methods are being called
  + mainMenuHelpButton
    - Verify clickabilty
    - Verify visibility
    - Verify proper methods are being called
* OfflineConfigurationActivity
  + offlineTwoPlayerButton
    - Verify clickabilty
    - Verify visibility
    - Verify displays 2 input fields are shown
  + offlineThreePlayerButton
    - Verify clickabilty
    - Verify visibility
    - Verify displays 3 input fields are shown
  + offlineFourPlayerButton
    - Verify clickabilty
    - Verify visibility
    - Verify displays 4 input fields are shown
  + offlineSixPlayerButton
    - Verify clickabilty
    - Verify visibility
    - Verify displays 6 input fields are shown
  + offlineRedPlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlineGreenPlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlinePurplePlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlineBluePlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlineYellowPlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlineOrangePlayerNameEditText
    - Verify visibility
    - Verify accepts text
    - Verify proper error on no input
  + offlineGameActivityButton
    - Verify clickabilty
    - Verify visibility
    - Verify proper methods are being called

Awaiting Final UI Control Element Tables

* OfflineGameActivity
  + offlineMoveResetButton
    - Verify clickabilty
    - Verify visibility
    - Verify proper methods are being called
  + offlineMoveDoneButton
    - Verify clickabilty
    - Verify visibility
    - Verify proper methods are being called
  + gameCanvas
    - Verify pieces are movable
    - Verify game hints are being displayed
    - Verify invalid moves are found
  + ResumeDialog
    - Verify is called at proper time
    - Verify visibility
    - offlineAcceptContinuationButton
      * Verify clickabilty
      * Verify visibility
      * Verify proper methods are being called
    - offlineDeclineContinuationButton
      * Verify clickabilty
      * Verify visibility
      * Verify proper methods are being called
  + EndofGameDialogDialog
    - Verify is called at proper time
    - Verify visibility
    - offlineGameEndToHomeButton
      * Verify clickabilty
      * Verify visibility
      * Verify proper methods are being called
    - offlineGameEndToNewButton
      * Verify clickabilty
      * Verify visibility
      * Verify proper methods are being called
  + Verify game is playable
* HelpActivity
  + Verify text is visible
  1. - Integration testing
* MainActivity and OfflineConfigurationActivty and HelpActivity
* Redo unit tests
* Verify transitions between activities are functional
* MainActivity and OfflineConfigurationActivty and GameBoardActivity and HelpActivity
* Redo unit tests
* Verify transitions between activities are functional
  1. - Performance and stress testing

N/A

* 1. - Regression testing

N/A. Modification were made on the activities that render the old test useless.

* 1. - Ease of use testing

A focus group shall be assembled and given access to the functioning application they will also be given a set of tasks to accomplish. Each member of the focus group shall then fill out an Ease of Use Testing Form (REPLACE\_APPENDIX\_<Ease of use testing feedback form>) . The forms will then be tallied and actions shall be taken in accordance with the results at the retrospective meetings.

* 1. - Acceptance testing

Criteria and this phase testing to be determined by team lead.

1. – Testing feedback procedure

At the end of each test phase or immediately following a failure of an in phase test, a Test Feedback Form (REPLACE\_APPENDIX\_<Test feedback form>) shall be generated. The feedback form will be generated as an issue on GitHub with the contents of the (REPLACE\_APPENDIX\_<Test feedback form>). Further action shall be determined on case bases. However failures for unit tests at the developer level are not required to generate a test feedback form, only passes specified in this document at the unit test phase are required to be documented with a test feedback form.

1. – Features to be tested

* MainActivity
  + Button functionality
  + Transition to OfflineConfigurationActivity
  + Transition to HelpActivity
* OfflineConfigurationActivity
  + Button functionality
  + Transition to OfflineGameActivity
  + Transition to HelpActivity
  + Transition to MainActivity
* OfflineGameActivity
  + Button functionality
  + Game playability
  + Popup Dialogs
  + Transition to HelpActivity
* HelpActivity
  + Button functionality
  + Transition back to activity called from

1. – Features not to be tested

N/A

1. – Dependencies

Availability of classes and modules for current phase.

1. – Tools

Eclipse

JUnit API

Android Testing API

1. – Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Project Role | Signature | Date |
| 1. Curtis Smith | Project Lead | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_ |
| 2. Peter Pobojewski | Deputy Lead | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_ |
| 3. Ben Stitt | Documentation Lead | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_ |
| 4. Saajid Mohammed | Test Lead | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_ |

APPENDICES

REPLACE\_APPENDIX\_<Test feedback form>

Test feedback form

Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Project Phase: \_\_\_\_\_\_\_\_\_\_\_\_\_ Test Phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_

Tester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pass\Fail\Extra Consideration Required: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Remarks (If fail what caused failure): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Test Output (If Applicable): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Action Taken: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tester Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_ Project Lead Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Test Lead Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Project Lead Name: \_\_\_\_\_\_\_\_\_\_\_\_\_

Test Lead Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

REPLACE\_APPENDIX\_<Ease of use testing feedback form> Ease of use testing feedback form

Give each of the tasks a rating from 0 to 10 based on the difficulty of accomplishing the relevant tasks.

Task 1 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Task 2 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Task 3 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Task 4 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Task 5 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Task 6 Score: \_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Task 7 Score:\_\_\_\_\_

Task Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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General Remarks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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