
DIRECTED RESEARCH FINAL REPORT

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Project Title : SOLVE IT

Android application

Project Description:

This project is a one player game. It challenges the user to solve and correctly identify the correct pairs while flipping the least number of cards.

An option to select various difficulty levels is also allowed to select from while starting a new game.

Repository : <https://github.com/rackeshnavale87/MemoryGame>

Specifications

Framework Used : Android SDK (Eclipse)

Languages Used : Android programming, Java

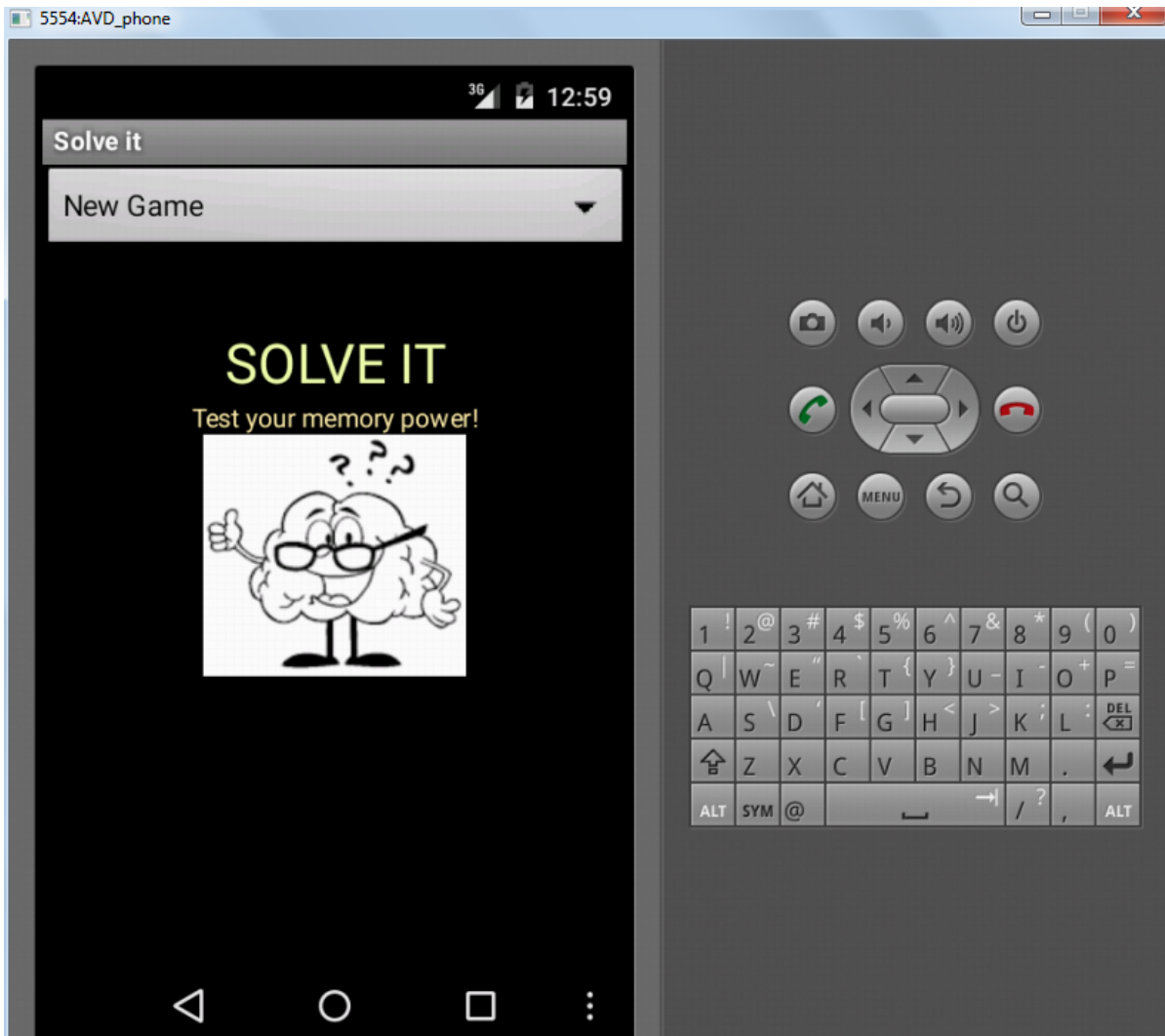
Goals:

The primary goal of this directed research is to get hands on experience in android technologies and thus enhance my skills in developing native Android games like:

1. Designing the various components of the application including front-end user interface.
2. Learning to design the pages or components of the application.
3. Understanding the nuances of Unit testing, Integration testing and System testing to get an efficient working application.

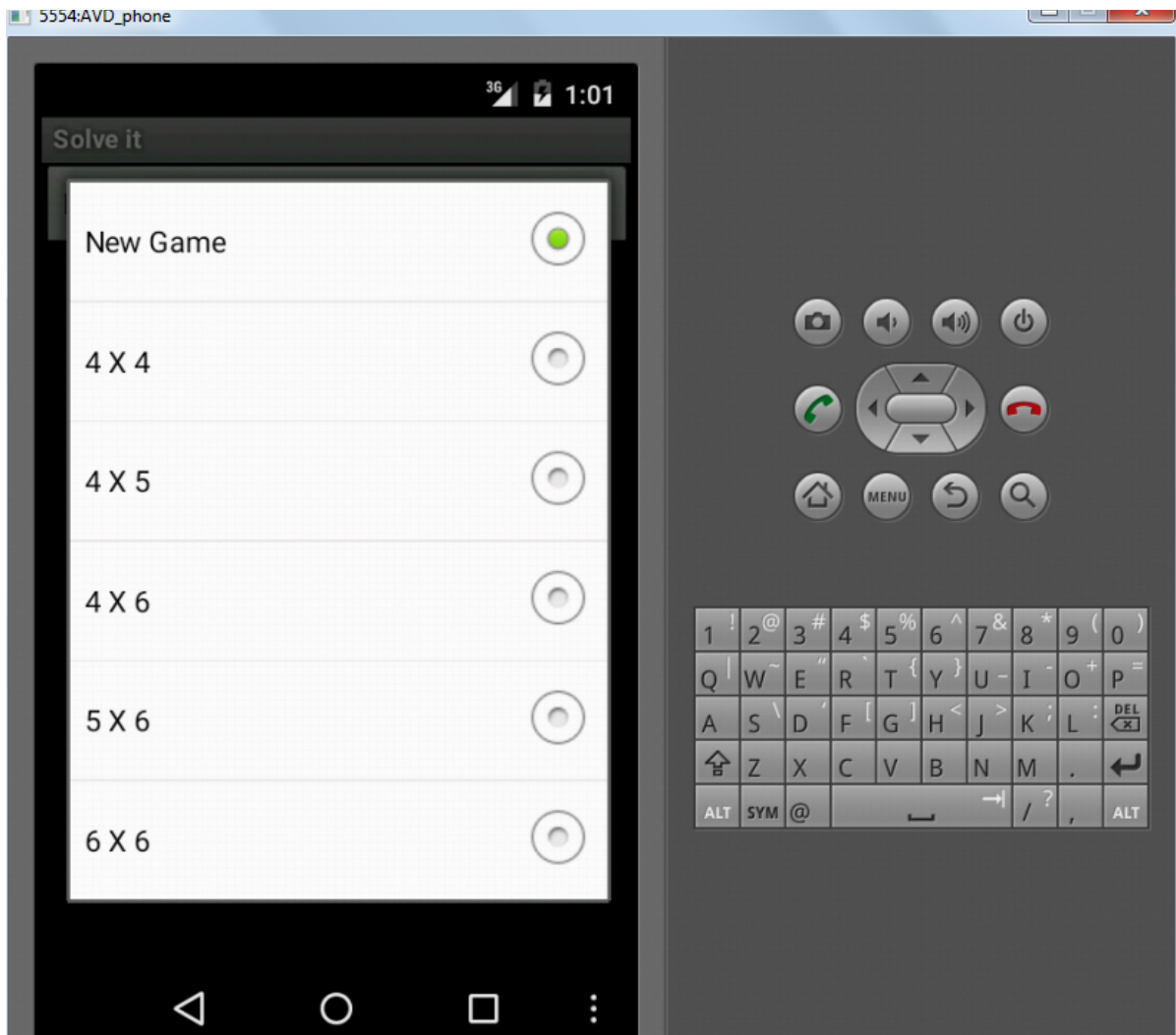
Description:

a. Welcome Screen



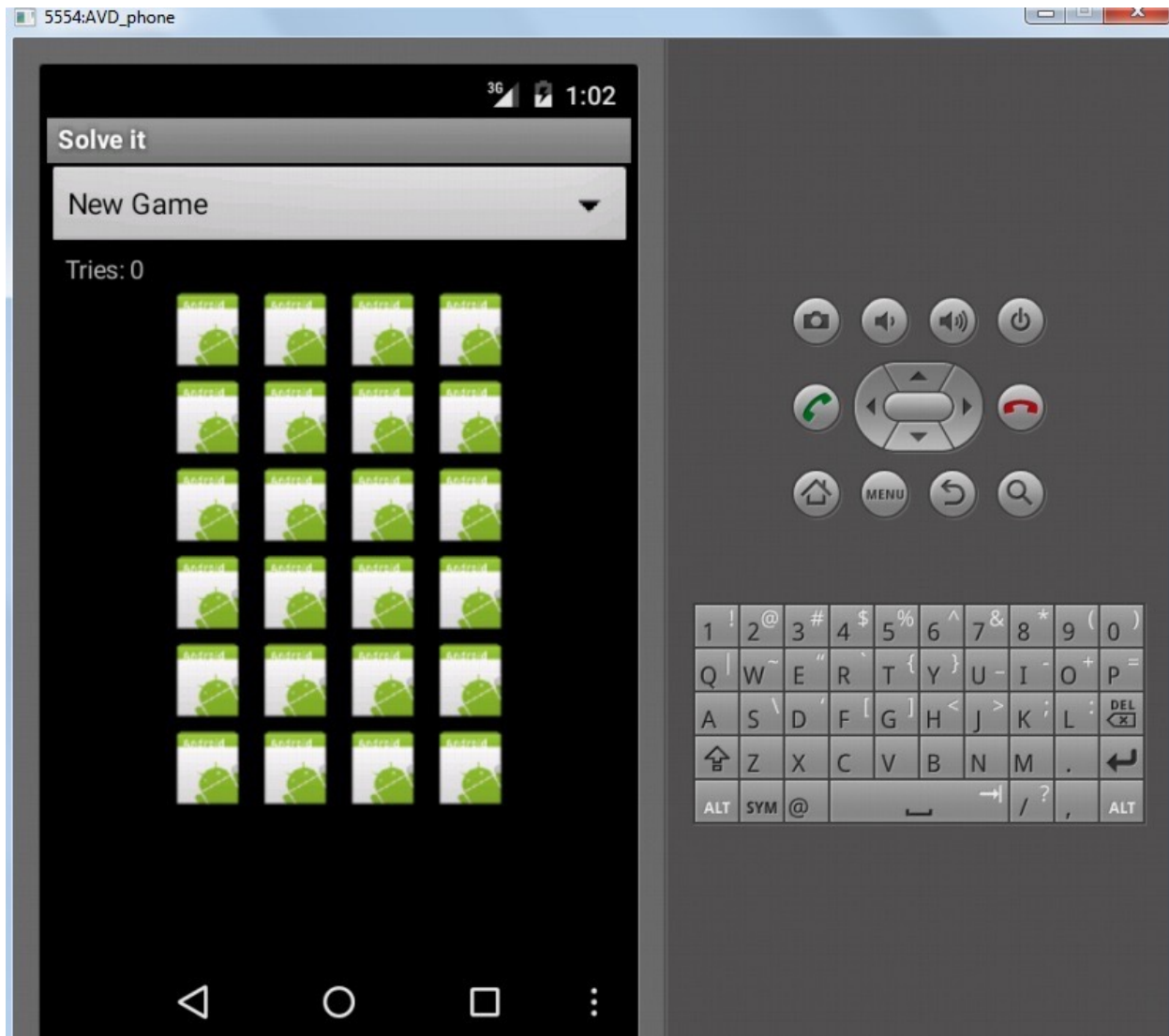
Above is the welcome screen of the app which displays the logo and an option to start a new game.

b. Select difficulty level:



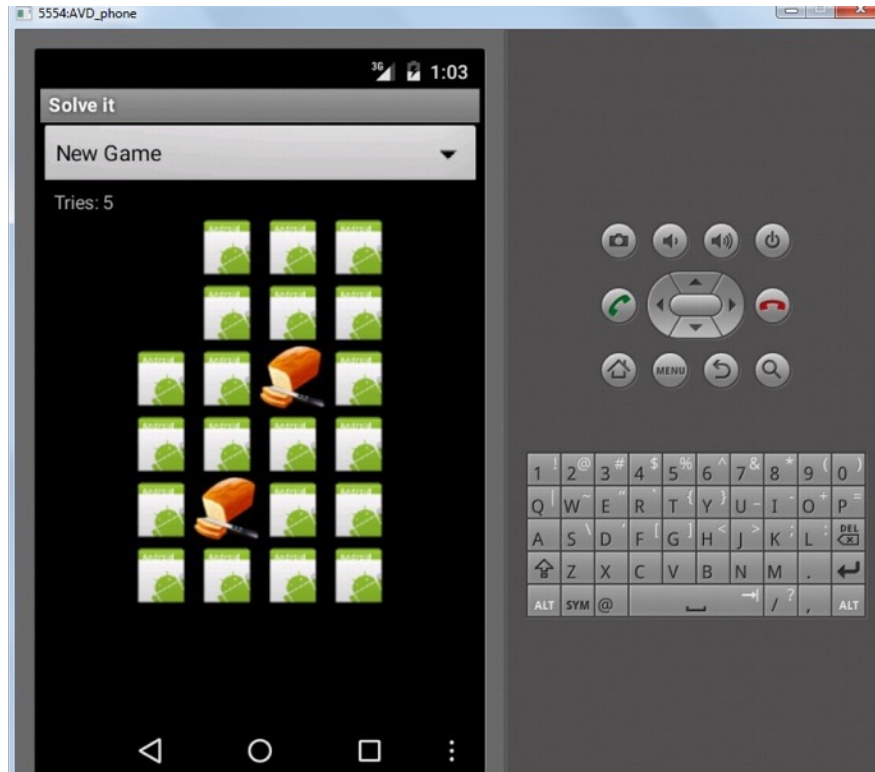
Above screen allows users to select the difficulty level by selecting an $m \times n$ game.
for example player can select a new game with 4×4 or 4×5 blocks game.

c. New Game start:

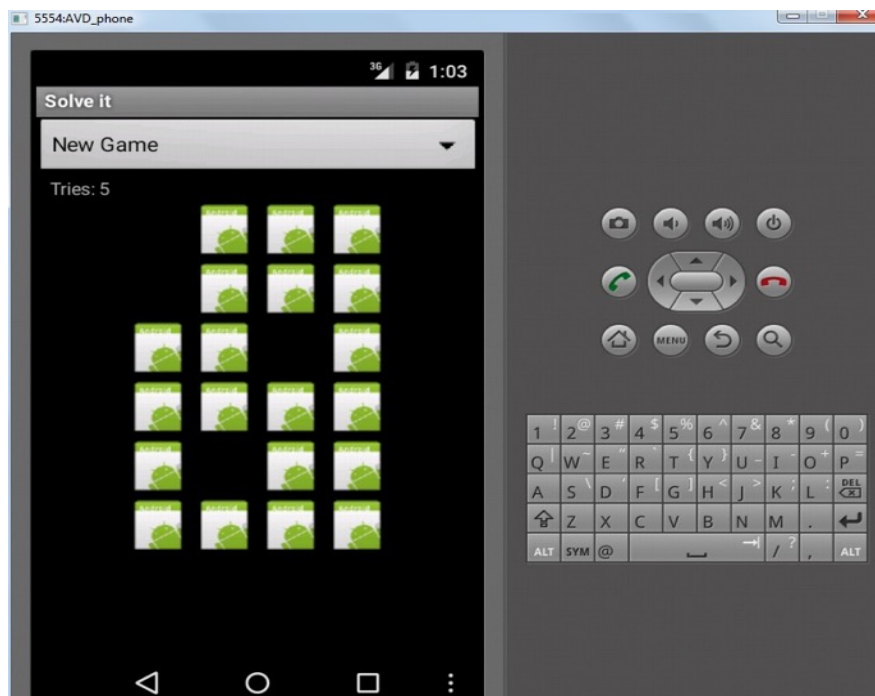


As seen above, such kind of screen is displayed once a new game is started. All the cards are flipped and facing backwards. Number of tries is initialized to 0.

d. Playing the game:



Player starts by first flipping one card and then tries to find its pair. If the pair matches, the cards are made invisible and number of tries is increased. If there is wrong guess, the cards are flipped back again and again the number of tries increases as shown below.



The game is over when all the pairs are corrected identified and the screen looks empty.

Future Scope:

- o As a future scope, the game can be extended as a challenge to n number of players and then comparing for the winner.
- o Another feature that allows a user to challenge himself by setting up a timer can also be added.