**Android Thirteen Multiplayer Game**

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Features Implemented:

* Implemented Single player and multiplayer where multiplayer can be played using Bluetooth.
* There is a programmed AI if there are less than 4 people in the game.
* Created random card shuffling.
* Designed and implemented a UI interface.

Features Not Met:

* Graphically does not show many cards other players have.
* Graphically does not show the order in which players get rid of all their cards
* Graphically does not show indicator for a winner, only an indicator for the game being over.
* Does not have a strong indicator showing whether the player passed.

Any Bugs in the release:

* Player turn indicator is sometimes does not highlight the correct player turn because of incorrect code handling the turn indicators. (Fixed 12/15/16)
* Player may not be able bomb a two with a four-of-a-kind (Fixed 12/15/16)
* Multiplayer crashes on a certain condition where the round has been won by a player and the update game message has been sent, but sequentially before the new round message. This is supposed to happen, but in the crash case, the contents of the message are not handled correctly and results in an array index exception crash. (Fixed 12/15/16)

How to Build and Run the Program

* Download the Android Studio IDE
* Unzip the folder “ThirteenGameSmash.zip”
* Run Android Studio and open existing projects
* Navigate to the folder and open it
* Run the application with an android phone with developer options enabled and usb debugging turned on.

OR

* Just install the up to date apk file provided.