

TouchDeck: Test report

Test environment

Test devices

- Asus nexus 7 - Android 4.3
- Sony ericsson Xperia Arc S - Android 4.0.4
- Samsung Galaxy S - Android 4.3
- HTC Incredible S - Android 4.0.4
- Emulator - Android 4.0.3

Software environment

- Eclipse Kepler Release
- Android SDK - Target API 15
- Robotium Solo 4.3

Application version

TouchDeck v0.2

Automatic tests*** Unit tests**

Unit test cases are used for testing models and game logic

*** Gui tests**

Robotium is used for testing the gui by simulating a user

All tests must be run individually, not in sequence

Testfile	Type	Test	Result
GameControllerTest	Unit	Create	Pass
GameControllerTest	Unit	Flip	Pass
GameControllerTest	Unit	Move	Pass
PileViewTest	Gui	FlipCard	Pass
PileViewTest	Gui	SendCard	Pass
TableViewTest	Gui	CreatePile	Pass
CardTest	Unit	Constructors	Pass
CardTest	Unit	Equals	Pass
CardTest	Unit	FlipFace	Pass
CardTest	Unit	GetFaceState	Pass
CardTest	Unit	FaceDown	Pass
CardTest	Unit	FaceUp	Pass
PileTest	Unit	AddTakeGet	Pass
PileTest	Unit	Create	Pass

Manual Tests

Test ID	Result	Comment
1	Pass	
2	Pass	A simple check to assure that the GUI responds.
3	Pass	
4	Pass	
5	Pass	
6	Pass	
7	Pass	
8	Pass	
9	Pass	
10	Pass	
11	Pass	
12	Pass	
13	Pass	
14	Pass	

Test Cases

Test Id:

1

User Story Title:

“... have access to a deck of cards to be able to play card games”

Dependency:

#2, #6, #7

PreCon:

A new session has been started and that at least one pile is shown.

PostCon:

The moved card is on top of the target pile.

Test Sequence:

1. Click on a pile of your choice.
2. Verify that a detailed view of the cards in the pile is shown.
3. Tap on a card of your choice.
4. Tap on "Flip card".
5. Verify that the face state of the card has changed.
6. Tap the same card again.
7. Tap on "Flip card".
8. Verify that the face state of the card has changed again.
9. Tap the same card again.
10. Tap on "Move card".
11. Choose target pile.

Test Id:

2

User Story Title:

“... have a graphical user interface in order to control the game”

Dependency:

PreCon:

Ensure that a new session has been started and a pile showing a deck of cards is shown.

PostCon:

N/A.

Test Sequence:

1. Tap the pile and verify that the tapping was recognized (that something on the screen changes). Ignore any following actions and events.

Test Id:

3

User Story Title:

“... create piles to hold cards”

Dependency:

#2

PreCon:

A new session has been started and that exactly one pile, showing a deck of cards, is shown.

PostCon:

There exist two new piles:

One with the name entered and one with a default name.

Test Sequence:

1. Click on the TableView, outside the pile.
2. A dialogue for naming a new pile is shown.
3. Enter a unique name and click OK.
4. Click on the Table View, outside the two piles.
5. A dialogue for naming a new pile is shown.
6. Leave the text field empty and click OK.

Test Id:

4

User Story Title:

“... start a game session to play a game locally”

Dependency:

#2

PreCon:

Touchdeck is not running.

PostCon:

A game session is running.

The TableView is shown.

One pile, containing a predefined quantity of full deck of cards, exists and is shown in the TableView.

No other pile exists in the TableView.

Test Sequence:

1. Start Touchdeck.
2. Verify that there is a start screen with the text "Create Game".
3. Tap on the text "Create Game".
4. Verify that you get a table overview with exactly one pile of cards.

Test Id:

5

User Story Title:

“... have a graphical interface to display cards in a pile”

Dependency:

#2

PreCon:

A session is running and that the TableView is shown.

PostCon:

The TableView looks exactly as before inspecting the pile.

Test Sequence:

1. Make a mental note of what is shown on the TableView.
2. Tap a pile.
3. Verify that the cards in the selected pile are shown in their current face state.
4. Click the back button.

Test Id:

6

User Story Title:

“... move a card from one pile to another”

Dependency:

#2, #3, #5

PreCon:

A session is running, the TableView is shown containing at least two piles.
At least one pile is non-empty.

PostCon:

The card you moved is now placed on top of the target pile.

Test Sequence:

1. Click on a non-empty pile of your choice.
2. Click on one of the cards in the detailed view.
3. Click on the option to "Move Card".
4. Click on the name of the desired target pile.
5. Click the back-button.

Test Id:

7

User Story Title:

“... be able to flip a card, after inspecting a pile, to show or hide its value”

Dependency:

#2, 5

PreCon:

A new session has been started and that at least one pile is shown.

PostCon:

N/A.

Test Sequence:

1. Click on a pile of your choice.
2. Verify that a detailed view of the cards in the pile is shown.
3. Tap on a card of your choice.
4. Tap on "Flip card".
5. Verify that the face state of the card has changed.
6. Tap the same card again.
7. Tap on "Flip card".
8. Verify that the face state of the card has changed again.

Test Id:

8

User Story Title:

“...delete an empty pile to make room for new ones”

Dependency:

N/A

PreCon:

Have an empty pile at position p that a player on another device is currently viewing

PostCon:

Pile position p shouldn't contain a pile for either device and neither device should have experienced an application crash.

Test Sequence:

1. Long press on the empty pile.
2. Press the delete option in the context menu that appears.

Test Id:

9

User Story Title:

“...be able to see the name of a pile.”

Dependency:

N/A

PreCon:

Have a game session running

PostCon:

Have a pile, that in an apparent manner displays the first six characters of its name on all devices.

Test Sequence:

1. Press on an empty pile position.
2. Enter a name that is longer than 20 characters.
3. Verify that you are prompted to enter a shorter name.
4. Enter a name between 7 and 20 characters.

Test Id:

10

User Story Title:

“...see how many cards are in a pile”

Dependency:

N/A

PreCon:

Have a game session with two devices

PostCon:

The deck card counter shows 51 and the new pile shows 1 on both devices.

Test Sequence:

1. Create a new pile.
2. Verify that the deck card counter shows 52 and the new pile shows 0 on both devices.
3. Move a card from the deck to the new pile.
4. Verify that the deck card counter shows 51 and the new pile shows 1 on both devices.
5. Move another card from the deck to the new pile.

Test Id:

11

User Story Title:

“...be able to have a pile of cards automatically shuffled so I don't have to do it myself.”

Dependency:

N/A

PreCon:

Have a game session running on a device with a deck on the table

PostCon:

The deck is arranged in another way than before

Test Sequence:

1. Click the deck and flip some cards to see how they are ordered
2. Go back to the tableView
3. Longclick the deck and press 'shuffle'
4. Click the deck and flip some cards to see they are not in the same order (The probability that they are exactly the same is minimal $1/52!$)

Test Id:

12

User Story Title:

“...play with other users on multiple devices.”

Dependency:

N/A

PreCon:

Have a game session running on one of two devices. This device is called the host.

PostCon:

N/A

Test Sequence:

1. The second user starts the app on the second device and click join game
2. Enter the ip address of the host.
3. Make sure there is a deck on the table on both devices
4. Perform tests 3, 5, 6, 7, 8, 9, 10, 11 on both devices
5. Make sure the state updates correctly for all the tests on both devices

Test Id:

13

User Story Title:

“...set an entire pile to either face up or down.”

Dependency:

N/A

PreCon:

Have a game session running on a device, where there is a pile with cards on the table.

PostCon:

All cards in said pile now face down.

Test Sequence:

1. Press and hold on a pile with cards that has at least one card facing down
2. Select the option to face all cards up
3. Enter the pile and inspect if all cards were faced up
4. Go back to the table view and choose the option to face all cards down

Test Id:

14

User Story Title:

“...be able to send all cards in a pile to another pile.”

Dependency:

N/A

PreCon:

Have a game session running on a device with two piles on the table, one of which has cards.

PostCon:

The pile that the cards were transferred from is now empty, and all cards has ended up in the other pile.

Test Sequence:

1. Press and hold on a pile with cards
2. Select the option to move all cards to another pile
3. Make sure the list that comes up displays all piles currently on the table
4. Select the other pile