ReadyForAPet: Acceptance tests

Several tests have been set up to test the main features in the application. These tests are presented below.

Tests

T01 - Test starting game
T02 - Test saving functionality
T03 - Test moodbar increase and animations for “eat” button
T04 - Test moodbar increase and animations for “walk” button
T05 - Test moodbar increase and animations for “play” button
T06 - Test moodbar increase and animations for “sleep” button
T07 - Test that the moodbar decreases
T08 - Test sound in PetActivity
T09 - Test sound-off-button in the PetActivity
T10 - Test sound limitation for the specific activity
T11 - Test sound in PlayActivity
T12 - Test sound in SleepActivity
T13 - Test taking picture with phone when it is rotated
T14 - Test animations in different devices
T15 - Test functionality in different devices
T16 - Test the quit game-button
T17 - Test the “How to play?” - button
T18 - Test the GPS distance counter
T19 - Test the impact of screen rotation
T20 - Test that the age of the dog is illustrated in PetActivity
T21 - Test how activities react on an incoming-call
T22 - Test if the dog can die

T01 – Test starting game

The purpose of this test is to check that you are able to start the game by creating a dog or continue an old game in the application.

Precondition: The user is in the SelectGame view.

Alternative 1 – Create new a pet

1. Click “Create new pet”.
2. Write the name of the pet in the TextField.
3. Click “Create Pet”.

    Expected result:

    Alternative 1 – The user already have an old pet

    1. The user gets an alert when trying to create a new pet and by that delete the already existing pet.

    2. The user can choose if he/she wants to continue creating a new pet or return to the SelectGame view.

a) If the user chooses to return to the SelectGame view step two and three above never happens.
b) If the user chooses to create a new pet step two and three happens and a new pet should be created which is shown in the view PetActivity when a dog appears and welcomes the user with a greeting.

Alternative 2 – The user does not have an existing alive pet
A pet should be created which is shown in the view PetActivity when a dog appears and welcomes the user with a greeting.

Alternative 2 – Continue with old pet
1. Click Continue game.

Expected result:
Alternative 1 – The user already have an old pet
PetActivity starts and the users dog appears and welcomes the user with a greeting.

Alternative 2 – The user does not have an existing pet
A warning message appears and the user is not able to continue the game because there exist no old game.

Related user stories:
As a user I want to get to a new decision point where I am able to create a pet and pick a name for it.

As a user I want to be able to create a new dog even though I already have an old existing one.

As a user I want to be warned before I create a new pet when I already have an existing pet.

As a user I want to get a warning when I'm trying to continue a game without an existing pet.

T02 - Test saving functionality
The purpose is to check that the name and the mood that the pet had last time playing is stored correctly when restarting the application and continuing the previous game.

Precondition: The user is in the PetActivity view and the pet has a name and a mood.

1. Click the backward hardware button two times.
2. Click “Quit”.

3. Start the application.
4. Click “Play”.
5. Click Continue Game.

Expected result:
The welcome message, that appears when you get to the activity in PetActivity, contains the name of the pet, and the mood that appears in the mood bar is the same as it was when leaving the application.

Related user story:
As a user I want my dogs name and mood to be saved until the next time I play.

T03–Test moodbar increase and animations for eat button

The purpose is to check that the pet feels better, which is illustrated in the moodbar, when the pet eats. It should also test the animations that are connected to the eat button.

Precondition: A dog must exist and the user is in PetActivity

1. Click on the eat button.

Expected result:
Alternative 1 - the dog is hungry
1. The dog says “Yummie!” and a dogbiscuit appears.
2. During the time the dog eats the dogbiscuit reduces and it’s not possible to play, sleep or walk.
2. The mood increases with one step, which is shown in the moodbar.

Alternative 2 - the dog is full
1.The dog says, “I’m full”.
2.The mood is not affected and the moodbar does not change.

Related user stories:
As a user I want to be able to press a button so that the dog eats and feels better which is shown in the moodbar.

As a user I want to see animations which show that the dog is eating.

T04 – Test moodbar increase and animations for walk button

The purpose is to check that the pet feels better, which is shown in the moodbar, when it has been out for a walk. It should also test the animations that are connected to the walk button.

Precondition: A dog must exist and the user is in the PetActivity

1. Click on the “walk” button.

2. Click “start walking”.
3. Take a walk for at least 100 meters.
4. Click on the “stop walking” button.

Expected result:
The activity never starts and thereby step 2-4 never happens
Alternative 1 - the dog is too hungry to walk
1. The dog says, “I’m too hungry”.
2. The mood is not affected and the moodbar does not increase.

Alternative 2 - the dog is too tired to walk
1. The dog says, “I’m tired! I want to rest!”.
2. The mood is not affected and the moodbar does not change.

The activity starts
Alternative 1 - the dog wants to walk and walks over 100 meters
1. The dog says “Yeey! Great exercise!”.
2. The mood is affected and the moodbar increases.

Alternative 2 - the dog wants to walk and walks under 100 meters.
1. The dog says, “I want to walk more!”.
2. The mood is not affected and the moodbar does not increase.

Related user stories:
As a user I want to be able to walk with the dog and make it feel better which is shown in the moodbar.

As a user I want to see some animation when I walk with my dog.

T05 – Test moodbar increase and animations for walk button

The purpose is to check that the pet feels better, which is shown in the moodbar, when it has been playing. It should also test the animations that are connected to the play button.

Precondition: A dog must exist and the user is in the PetActivity.

1. Click on the “play” button.

Alternative 1
2. Chose “use standard photo”.
3. Press the “play” button.

Expected result:

Alternative 1 - the dog is too hungry to play and thereby step two and three never happens.
1. The dog says, “I’m too hungry”.
2. The mood is not affected and the moodbar does not increase.

Alternative 2 - the dog is too tired to play and thereby step two and three never happens.
1. The dog says “I’m tired! I want to rest!”
2. The mood is not affected and the moodbar does not change.

Alternative 3 - the dog starts dancing
1. A dancing dog appears on the screen for 15 seconds.

Alternative 2
2. Choose to take your own photo
3. Take a photo of a selected item
4. Press the play-button

Expected result:
Alternative 1 - the dog is too hungry to play and thereby step two and three never happens.
1. The dog says “I’m too hungry”.
2. The mood is not affected and the moodbar does not increase.

Alternative 2 - the dog is too tired to play and thereby step two and three never happens.
1. The dog says “I’m tired! I want to rest!”.
2. The mood is not affected and the moodbar does not change.

Alternative 3 - the dog starts dancing with the head of your photo
1. A dancing dog with the head of the photo you have taken appears on the screen for 15 seconds.

Related user stories:
As a user I want to be able to play with the dog and make it feel better which is shown in the moodbar.

As a user I want to see animations when I play with my dog.

As a user I can take a photo of my favourite dog and then watch it dance for me.

T06 - Test moodbar increase and animations for sleep button

The purpose is to check that the pet feels better, which is shown in the moodbar, when it has been sleeping. It should also test the animations that are connected to the “fall asleep” button.

Precondition: The user is in SleepActivity

1. Click on the “fall asleep” button.

Expected result:
Alternative 1 – The dog is asleep for more than 30 minutes

1. The dog starts to snore.
2. When waking it up the moodbar will increase and when sleeping for a longer time it will increase even more.

Alternative 2 – The dog is asleep for less than 30 minutes.

1. The dog starts to snore
2. When waking up it says “I want to sleep more!”.
3. The moodbar does not increase.

Related user stories:
As a user I want to be able to make my dog sleep and by that make it feel better which is shown in the moodbar.

As a user I want to see an animation and hear snoring while my dog is sleeping.

T07 – Test that the moodbar decreases

The purpose of this test is to test that the moodbar decreases after not taking care of the dog for a while. This example demonstrate eat but the same thing have been tested for walk, play and sleep.

Precondition: The user has just fed the pet.

1. Click the backward hardware button two times.
2. Click “Quit”.
3. Start the application after two hours or more.
4. Click “Play”.
5. Click Continue Game.

Expected result:
The mood bar should be less than it was when the user left the application.

Related user stories:
As a user I want to see a moodbar which shows the mood of the pet and shrinks when time pass.

T08 – Test sound in PetActivity

The purpose is to test that the music is on while the PetActivity is shown. This test was done for every possible way to get in to the PetActivity but here we only demonstrate one way.

Precondition: The user is in SelectGameActivity.

1. Click “Continue game”.

Expected result:
PlayActivity appears and music starts playing.

Related user story:
As a user I want to hear some background music when I am in the view PetActivity.

T09 - Test of sound button in the PetActivity

The purpose of this test is to check if the user is able to turn on/off the music in PetActivity if he/she wants.

Alternative 1
Precondition: The user is in PetActivity and the music is playing.

1. Click on the checkbox with the text “Sound” above.

Expected result: The music stops playing.

Alternative 2
Precondition: The user is in PetActivity and the music is not playing.

1. Click on the checkbox with the text “Sound” above.

Expected result: The music should start playing.

Related user story:
As a user I want to be able to turn the sound on and off in the PetActivity view.

T10 - Test sound limitation for PetActivity

The purpose of this test is to check if the music is turned off when leaving PetActivity. This test was done for every possible way out of PetActivity but here we only demonstrate one way.

Precondition: The user is in PetActivity and the music is playing.

1. Click the backward hardware button.

Expected result: The music should stop playing.

Related user story:
As a user I only want the theme song of the application to be played in the PetActivity view.

T11 - Test sound in PlayActivity

The purpose is that when you press “play” in PlayActivity you can hear audio.

Precondition: The user is in PlayActivity.

Alternative 1
1. Click on “Take your own photo”.
2. Take your photo.
3. Click “Play”.

Expected result:
1. Music starts playing and after 15 seconds it stops.

Alternative 2
1. Click on “Use standard photo”.
2. Click “Play”.

Expected result:
1. Music starts playing and after 15 seconds it stops.

Related user story:
As a user I want to hear music when playing with the dog.

T12 - Test sound in SleepActivity

The purpose is that when you press “fall asleep” in SleepActivity that you can hear audio.

Precondition: The user is in SleepActivity.

1. Click on the “fall asleep” button.

Expected result: A sound of someone snoring starts.

Related user story:
As a user I want to see an animation and hear snoring while my dog is sleeping.

T13 – Test taking a picture with phone when it is rotated

The purpose of this test is to check if the user is able to take a picture with their phone in any direction and still get the picture in the right direction.

Precondition: The user has clicked “Take a photo of your dogs face” in the PlayActivity.

Alternative 1
1. Rotate the screen 45 degrees to the left in a horizontal direction.
Alternative 2
1. Rotate the screen 45 degrees to the left in a vertical (up-side down) direction.
Alternative 3
1. Rotate the screen 45 degrees to the left in a horizontal direction.

Expected result:
The picture should always appear in the right direction in the application.

Related user story:
As a user I can take a photo of my favourite dog and then watch it dance for me.

T14 – Test animations in different devices

The purpose of this test is to check if the user interface looks perfect no matter what kind of size the phone using the app has.

1. Navigate through all different activities with a phone with a small screen.
2. Navigate through all different activities with a phone with a large screen.

Expected result:
The user interface looks the same in both of the devices.

T15 – Test functionality in different devices

The purpose of this test is to check that the application works on devices with the lowest chosen API-level and the highest chosen API-level

1. Navigate through all different activities with a phone with API level 10.
2. Navigate through all different activities with a phone with API level 17.

Expected result:
The application functionality should work as expected on both chosen devices.

T16 - Test the quit game-button

The purpose is to check that the user can quit the game

Precondition: The user has played the game and is in the MainActivity.

1. Click “Quit”

Expected result:

The application should quit.

Related user story:
As a user I want to have a start menu where I can choose how to play, start and quit.

T17 - Test the “How to play?” button

The purpose is to check that the “How to play?” button starts the requested activity with an information board about how to play the game.

Precondition: The user is in MainActivity.

1. Click on the button “How to play?”

Expected result
The information board shows with basic information of how to play the game.

Related user story:
As a user I want to have a start menu where I can choose how to play, start and quit.

T18 - Test the GPS distance counter

The purpose is to check that the distance counter shows how far the user has walked.

Precondition: The user is in WalkActivity.

1. Click on the button “start walking”.

Expected result:
1. A text line appears with the message with the walked distance.
2. The text updates each 30 seconds and reacts on a change in position of 10 meter.

Related user story:
As a user I want that when pushing the “start walking” button that the GPS will measure the length of the walk and inform about the length to me.

T19 - Test the impact of screen rotation

The purpose is to check that the application is not affected of the rotation of the screen. The test includes all activities.

1. Navigate through all activities
    a) Rotate the screen 45 degrees to the left in a horizontal direction.
    b) Rotate the screen 45 degrees to the left in a vertical (up-side down) direction.
    c) Rotate the screen 45 degrees to the left in a horizontal direction.

Expected result:
The application is not affected of different directions of the device and continues to run in the same screen mode (without the screen rotating).

Related user story:
As a user I don't want the application to crash or look bad if I rotate my phone.

This test were made in all activities.

T20 - Test that the age of the dog is illustrated in PetActivity

The purpose is to check that the age of the pet is shown in PetActivity and that it is counting its lifetime continuously.

Precondition: The user is in CreateNewPetActivity

1. Write a name for your pet.
2. Click "Create new pet".
3. Wait one day.
4. Return to the pet activity after 24h and check the text view in the top of the page.

Expected result:
The text view shows that the pet is one day old.

Related user story:
As a user I want to see how old my dog is.

T21 - Test how the activities react on an incoming-call

The purpose is to see how the application reacts and that it doesn't crash. The test includes all activities.

1. Navigate through all activities
    a) Call the phone.

Expected result:
After the incoming-call the application returns to the same view without crashing.

Related user story:
As a user I want the application to return to the same state as I left it when the phone rang.

T22 – Test if the dog can die

The purpose of this test is to check if the dog dies if the user doesn't take care of it.

Precondition: The dog has not been fed or taken out for a walk for two days and the user is in the SelectGame view.

1. Click on "Continue game".

Expected result:
1. The dog dies and an animation when the dog flies like an angel to the sky appears. At the same time a sound is played and all buttons in PetActivity are enabled.

Related user stories:
As a user I want the dog to die when the dog has not eaten or walked for two days
As a user I want to see a nice animation when my dog dies.