Project Report

1. Project title

Pet Simulator – Pocket Pet

2. Team name

The Brogrammers

3. List of team members

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4. Project description

We will be implementing an app that is similar to a Tamagotchi toy. It will have features to love the pet, feed the pet, play with the pet, and clean up after the pet.

5. Requirements Specifications

1. Activity will have buttons for feeding, playing, and cleaning up after the pet. To make it easy for all users the buttons will have icons on them that show what it does (i.e., the affection button will have a heart on it, the food button will have food on it, the play with button will have something fun on it, and the cleanup button will have like a broom on it or something relevant to cleaning.).
2. The pet will start out as an egg or something equivalent and will hatch after a while to reveal the pet.
3. There will be 3 options that the pet can be, which will be randomly generated when the pet "hatches".
4. There will be set times where the pet will need to be cleaned up after.
5. There will be a "hunger bar" for determining when the pet needs to be fed, when the hunger bar goes to 0, the pet will die.
6. There will be a "happiness bar" for determining when the pet needs to play, when happiness bar goes to 0, the pet will die. The "happiness bar" will also go when the pet poops.
8. To "play" with the pet the user will need to press the designated play button.
9. To "feed" the pet the user will need to press the designated feed button.
10. To "clean" the pet the user will need to press the designated clean button.
11. To "love" the pet the user will need to press the designated button to be affectionate.
11. The pet will show emotion in some form either through facial expression or little bubble that show how the pet is feeling.
12. If the pet dies the user will be generated a new egg with a new pet.

6. Detailed Technical Description

Main Activity

This activity is what starts when the app opens.

Start button: This button is programmed to take you to the Pet Activity.

Info button: This button is programed to take you to the Info Activity.

Extra Features: There is an animation on the egg to make it shake, for some visual interest on this page.

Info Activity

This activity isn't too exciting; it is just a place where the user can come to get the basic information about the app. It gives a brief description and shows the user the possible pets they could randomly receive.

Home button: This button is programmed to take you to back to the Main Activity (The starting screen).

Pet Activity *To make this app easy to test things happen in seconds as opposed to minutes or hours.

This activity is where all the fun stuff happens. Data in this activity is being saved using shared preferences.

Home button: This button is programmed to take you to back to the Main Activity (The starting screen).

Heart button: This button is used to give the pet love which increases the Happiness by 5%. It also briefly changes the pet's facial emotion to happy.

Food Button: This button is used to feed the pet and it increases the Hunger by 5%. It also briefly changes the pet's facial emotion to happy.

Cleaning Button: This button is used clean up the pet's poop and it increases the Happiness by 5%. It also briefly changes the pet's facial emotion to happy.

Play Button: This button causes the pet to do a fun animation and increases the Happiness by 10%. It also briefly changes the pet's facial emotion to happy.

Egg Timer: This timer goes off after 10 seconds and then simulates the egg "hatching". Once it goes off the user gets a randomized pet. There is an animation on the egg to make it shake until it "hatches" then the randomized pet spawns in doing a fun bouncing animation.

Hunger Timer: This timer goes off every 15 seconds and it decreases the pet's hunger by 10% and will pop up an emotion bubble indicating hunger and changes the pet's facial emotion to upset.

Happiness Timer: This timer goes off every 15 seconds and it decreases the pet's happiness by 2% and will pop up an emotion bubble indicating hunger and changes the pet's facial emotion to upset.

Poop Timer: This timer goes off every 35 seconds and it spawns a poop image to simulate the pet pooping. When the pet poops the happiness decrease by 10%. It also shows the user a message telling them the pet has pooped and changes the pet's facial emotion to upset.

*All timers for this activity is being managed with Handlers. We made different timers for different things.

Once Hunger or Happiness reaches 0% the pet will be "dead" and the app is programmed to respawn a new egg and pet for the user. The app will kind of reset in a sense.

Extra Features for all Activities

Different music is played on each screen and a click sound is made when any button is pressed. Added Spanish as another language option to make it accessible.