Worksheet Outdoor App 2:

Dear students,

the following worksheet will guide you through the creation of an outdoor app to capture creatures in your environment.

Have fun!

Opens the TemplateOutdoorApp project in App Inventor.
There we have already prepared all the elements for you in the designer. Your task now is to think about which functions are needed for the buttons and the other components and how these can be developed.

With the help of the app, plants from the surroundings are to be recorded. For this purpose, the name of the plant, the place where it was found and a picture of the plant should be stored. The location sensor can be used to make it easier to find the place where the plant was found. You can take the picture directly from the app. Afterwards, the data of the plants (i.e. the name, the location and the picture) should be saved in a database and displayed in a list in the app.

We will need some important global variables as part of the development, what can you think of? Try to guess 3 important variables.

1. _____

2. _____

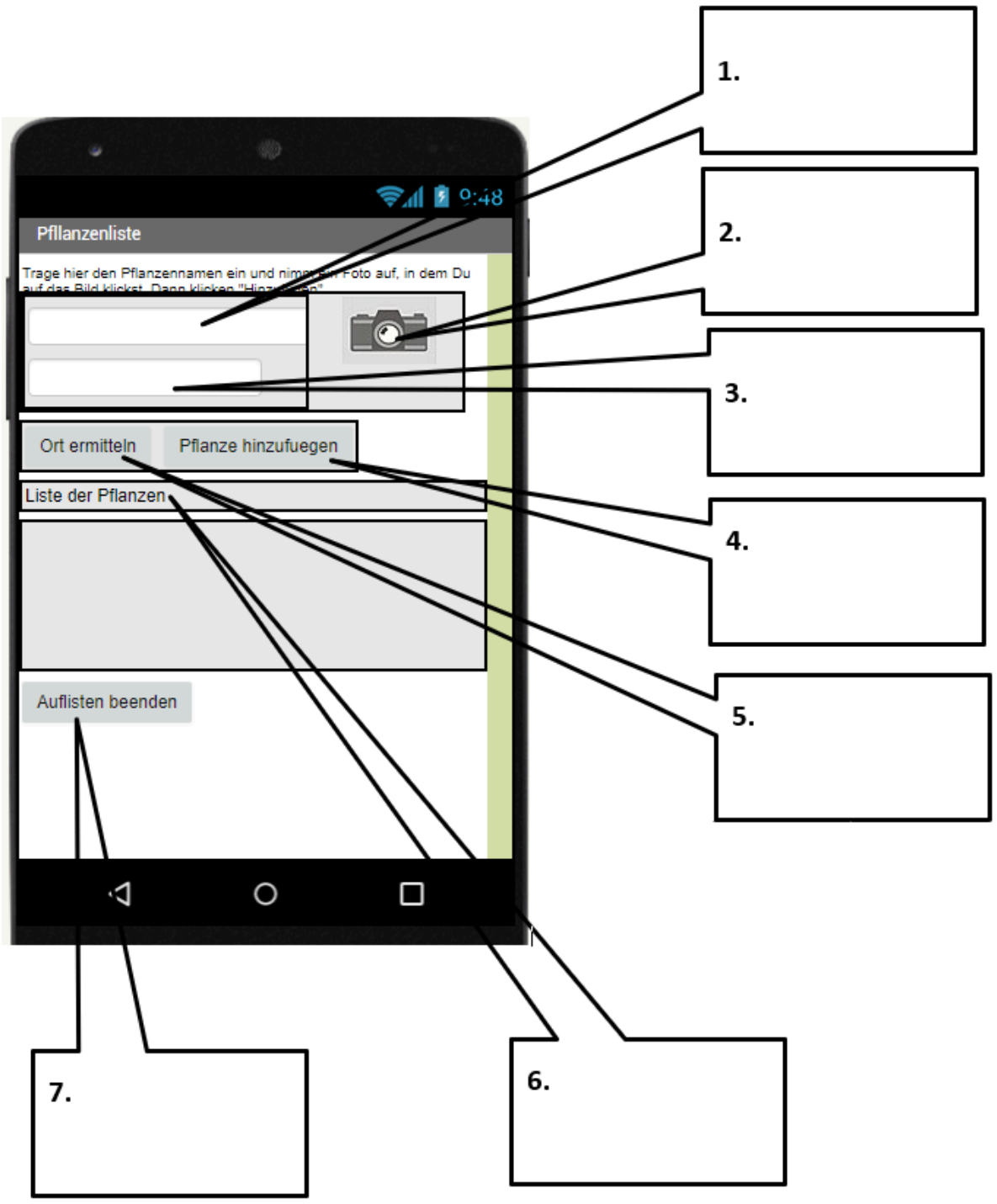
3. _____

Here is an overview of the variables, have you been able to guess any of them?

Now test the app on your tablet using AI Companion.

You should then see an arrangement that looks something like this:

Can you write in the speech bubbles what the respective components should do?

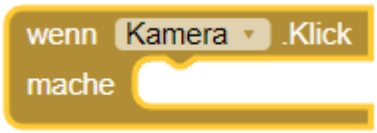


Let's just start from the top down.

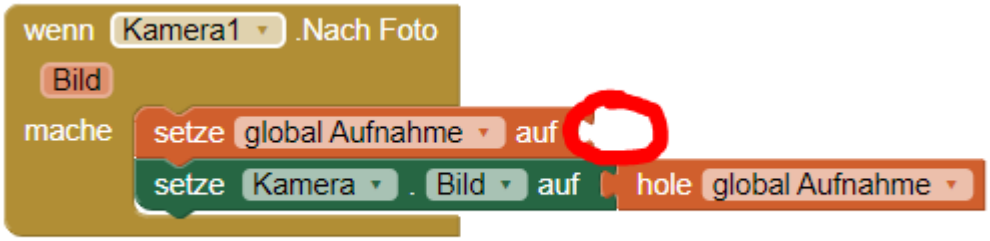
1. The first component is a text field in which we can enter the name of the plant.
2. This is the camera function, so you can easily take pictures from within the app.
3. You can enter the location here.

4. This saves a plant object in your list. The values come from components 1, 2 and 3. In addition, the added plant should also appear further down in the list display (component 6).
5. This key is to use the location sensor to automatically fill component no. 3.
6. All added plants are to be displayed here.
7. This button is to end the listing of plants within the list.

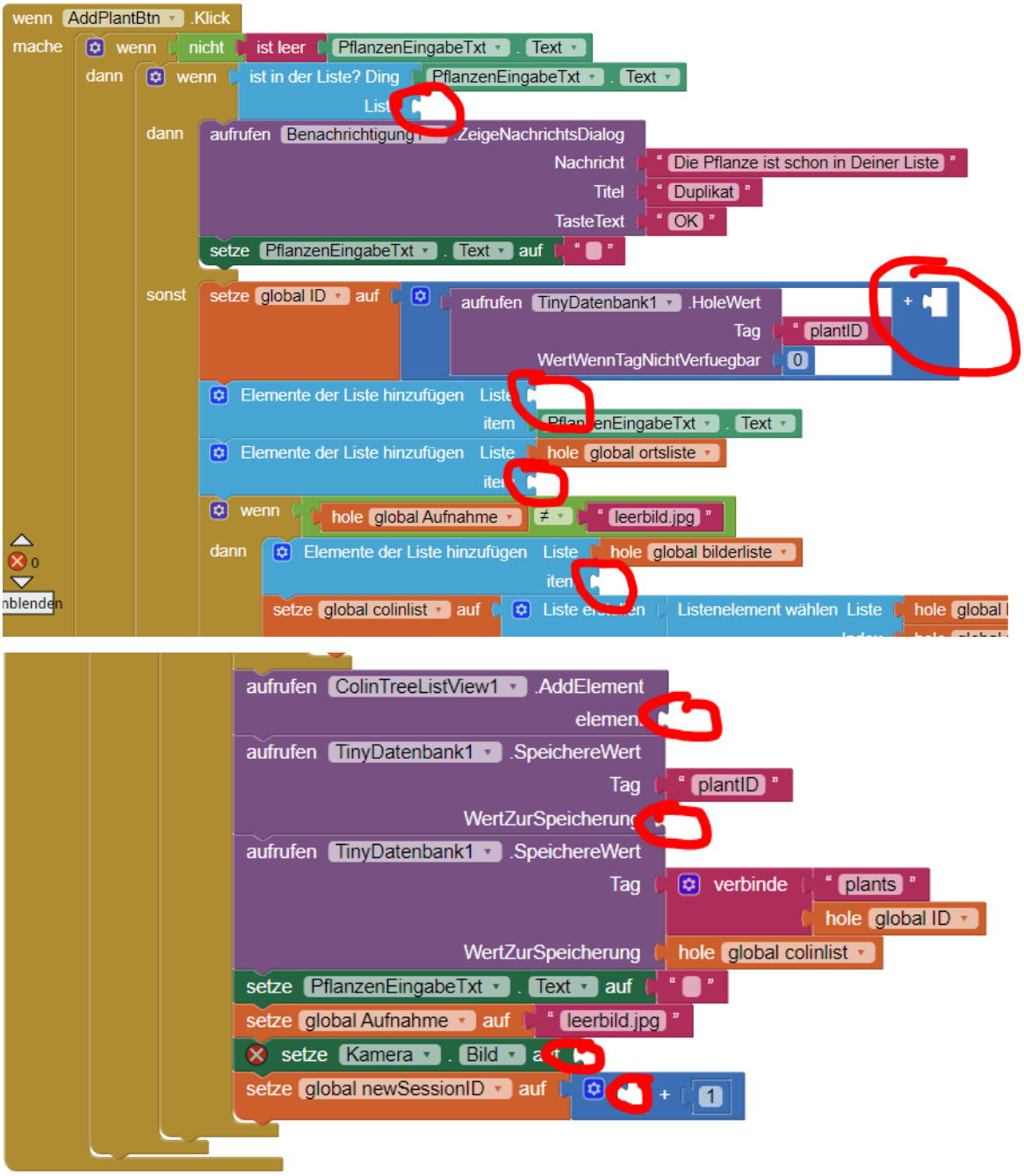
The first component where we have to do some programming is the camera function (No.2). First we have to define what should happen when the component is clicked. For this we need the following block:



Now think about which statement belongs in this block (tip: it is only one more line of code).
After that we have to deal with what should happen after taking the photo, for this you need this block, but the building block is missing at the place that is circled in red.



Next, let's programme the functionality for the button to add the plant. At this point we have to use some of the global variables. Since we have to do a lot for this button, you have received a part of it prefabricated. However, some components are missing, try to find out which components are needed. (Tip: Keep an eye on the global variables, they are important!) The places where building blocks are missing are circled in red.



The next component we have to program is the button with which the location sensor is to be used (no. 5). Again, there are missing components in the places that are circled in

red.