

## Hello InfoSphere



During this module, the work sheet will guide you through the creation of your first own App. Pay attention to the following symbols, which...

- ✗ point out the **goal** of the work sheet,
- ✗ **help** you mark things that are important, difficult, etc. and
- ✗ explain **assignments and instructions**.

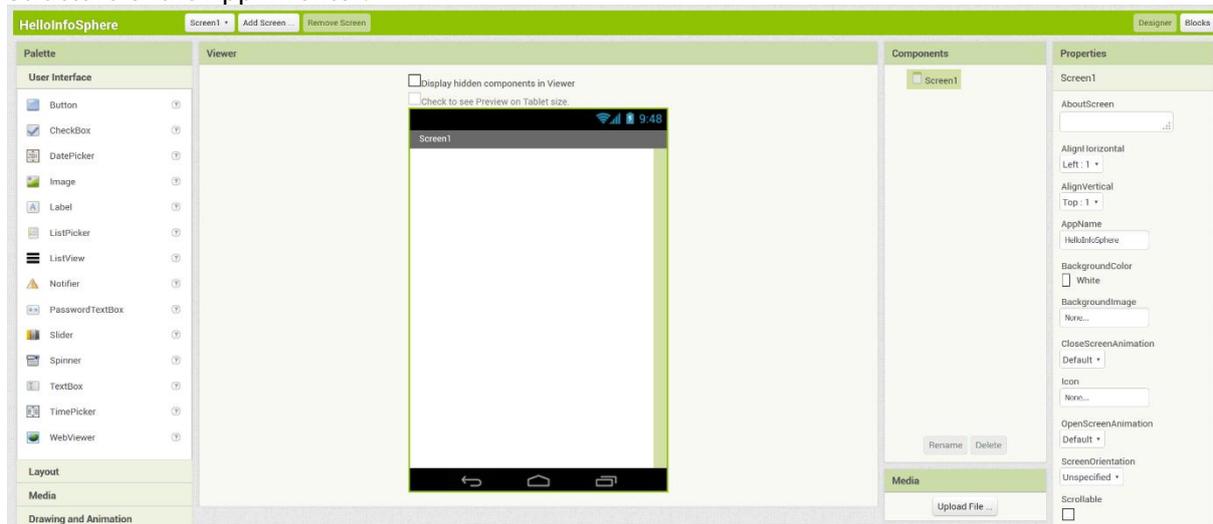


Welcome to the module **“InfoSphere goes Android”**. Now that you are all Android experts, you are ready to program this App. This work sheet will help you create an App, which

- ✗ displays a **text** (“Hello InfoSphere”),
- ✗ contains the **InfoSphere-Logo**,
- ✗ at the push of a button plays a **sound** file.

**A quick repetition:** To program your App, you will use a browser based developing tool called **“App Inventor”**. The App Inventor consists of a **Design-Editor** for the **visuals** and the **Blocks-Editor** for the **functions** of the App.

Structure of the App Inventor:



## Hello InfoSphere

### Create your first project

The **homepage** of the App Inventor should already be opened in your browser. For each App that you are going to make, you have to create a new project.



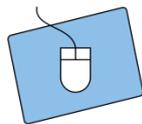
- 1.) Create your first project by clicking on the button "Start New Project".
- 2.) Give the project the name "HelloInfoSphere".
- 3.) Click "OK".



Start new project

### Set up a connection to the Smartphone

To test your App, follow these instructions:



- 1.) Click the "**Connect -> AI Companion**" button in the task bar.
- 2.) Start the App (AI2 Companion) on your Smartphone to scan the QR-Code.
- 3.) Scan the QR-Code.

Now you can work on your App and simultaneously test it on your cell phone. Should the connection ever break off, click on "**Connect -> Reset Connection**".

## Hello InfoSphere

### Add a text

The first thing you should add to your app is a text. Texts and headings are called **“Label”** in the App Inventor.

1.) Drag a **Label** from the **Palette** to the **Viewer**.

You’ve already created your first own text! ;) In the next step you should change the text. Click on **Label** in the components window. The text is now selected and you can look at its features in the Properties window.

- 1.) Change the name of your label in the **Components** window by clicking in **Rename**. Call it **“HelloInfoSphereLabel”**.
- 2.) Change the **Text** to **“Hello InfoSphere!”**.
- 3.) Just for the fun of it, change other properties like **BackgroundColor** or **FontBold** and see what happens.

## Hello InfoSphere

### The InfoSphere-Logo

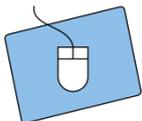
Now that we have a text, we can add a picture.



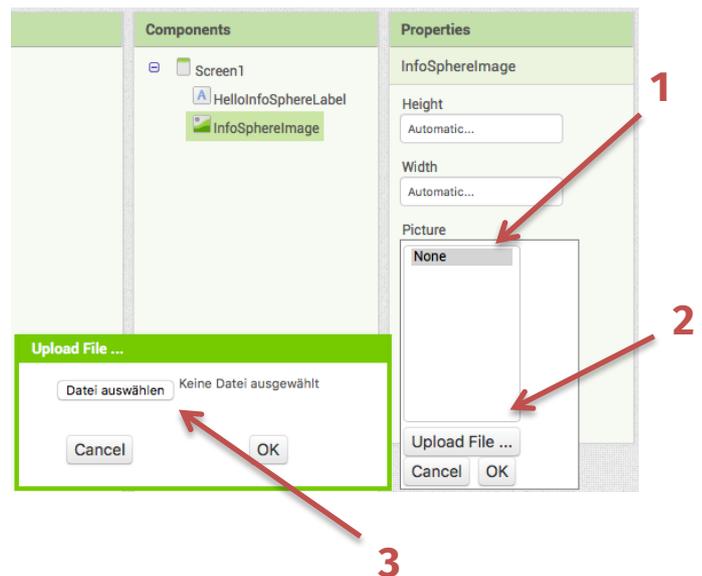
- 1.) Drag an **Image** from the **Palette** to the **Viewer**.
- 2.) Change the name of the image to "InfoSphereLogo" in the Components. Hint: If you have multiple elements, later you can tell from their names which one you are working on.



**Attention:** So far you cannot see the picture! That is, because you have only created the frame of the picture. You have to add the actual picture to your frame in the next step. In the **Components** window, click on the **InfoSphereLogo** and look at the Properties.



- 1.) Click on **None** in the **Picture** box.
- 2.) Click **Upload File**.
- 3.) Click on **Datei auswählen (Choose file)** and look for this file: Desktop / InfoSphere goes Android / HalloInfoSphere / logo.jpg and then click **OK**.



### Next up: the button

Buttons are labeled **Button** in the App Inventor.

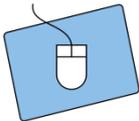


- 1.) Drag a **Button** to the **Viewer**.
- 2.) Change the **name** of the button to "PlayButton" in the Components.
- 3.) Look at the **Properties** and change the **Text** of the button to "Play sound".

## Hello InfoSphere

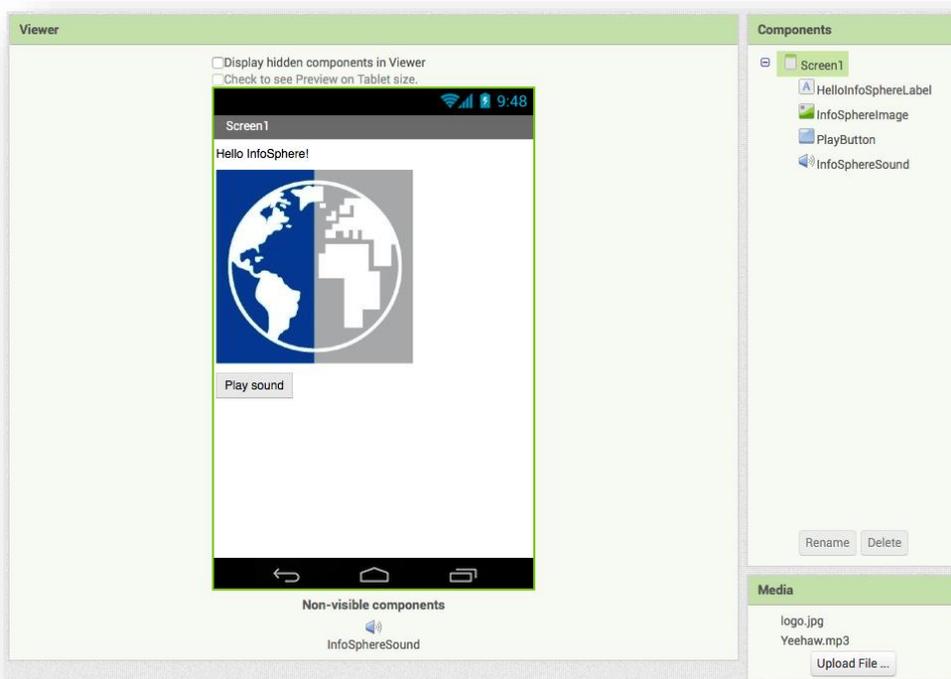
### Adding the sound

The last object you have to add is a **Sound**. A sound is similar to an image. The only difference is how it is displayed in the Viewer. Sounds are listed under **Non-visible components** below the App. Once you've added it to your App, you have to upload a sound file.



- 1.) Drag a **Sound** from **Palette** -> **Media** to the **Viewer**.
- 2.) In the Components change the name to "InfoSphereSound".
- 3.) In the Properties upload a new sound file as **Source: Desktop / InfoSphere goes Android / HalloInfoSphere / Yeehaw.mp3**.

### The intermediate result



Did you all get this far? Compare your results with this screenshot. If you're having trouble, you can ask your instructor, otherwise just keep on going. ;)

## Hello InfoSphere

### The Blocks-Editor

You have completed all assignments in the Design-Editor, now you have to take care of the functions of the App. In this case we want to answer the following question:

**“How can the App play a sound at the push of a button?”**

In order to add this feature you need the **Blocks-Editor**.



Switch from the Design-Editor to the Blocks-Editor (at the top right in the corner of the browser).



### The Button-Click

All of your elements (the Label, the Image, the Button and the Sound) have different functions you can use.

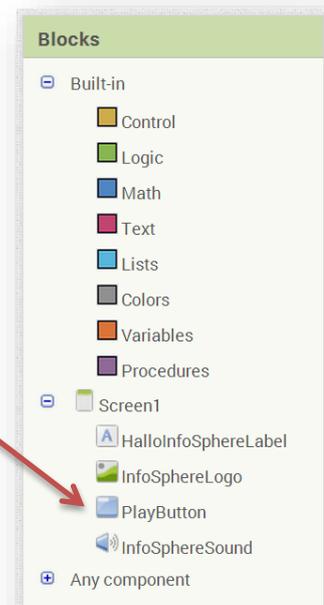
**As a reminder:** You can find the elements under **Blocks** on the left-hand side of your App Inventor surface.

Click on your **PlayButton** in the Blocks display and select the puzzle piece, which stands for the click function. It looks like this:

**When the PlayButton is clicked, then**



it will do everything that is clipped to the **do** area. So for now it does nothing!



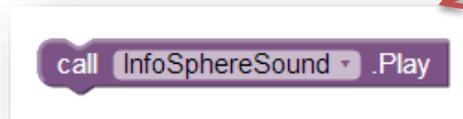
## Hello InfoSphere

### Play the sound

If you click **PlaySound**, the sound should be played. To do that, you have to clip a new block to the click function.



The block you supposed to use should **call** your sound (**InfoSphereSound**) to be **played**.



Very good!

You have created your own App. Now you're ready for the next one.

#### List of references:

 : InfoSphere

any other graphics are screenshots of App Inventor (<http://appinventor.mit.edu/explore/>)