



‘Create a Game’ with Android

The following is a description of how Android apps (also for iOS and Windows 8) can be tailored to fit the learning story ‘Creating a Game’.

This is the game design brief: *Explore the environment around our school and design an engaging game that utilizes geolocation technologies. Select an audience for your game and ensure that your game presents an engaging educational experience for them.*

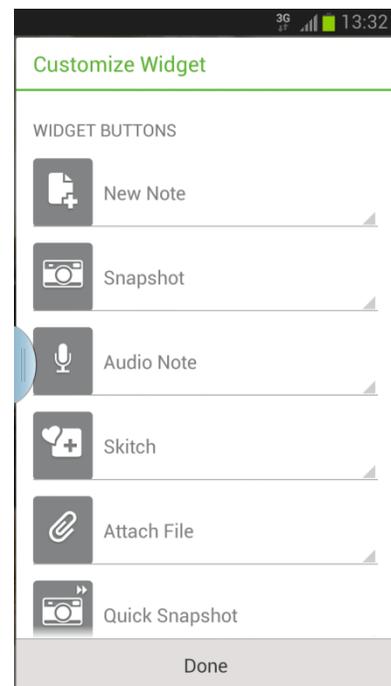
To meet that challenge a group of learners want to primarily use their smartphones. Particularly two apps come in handy: Evernote and Munzee. Evernote for all the planning and reflection, and Munzee for the game design.

This team focuses on math as the subject for the game.

The team begins with Evernote. They choose to have Evernote as a Widget on their phones (a separate download in Google Play). As shown in the picture to the right you can customize the widget so only the most important buttons show up. For this project ‘New Note’, ‘Snapshot’, ‘Audio Note’ and ‘Skitch’¹ are used.

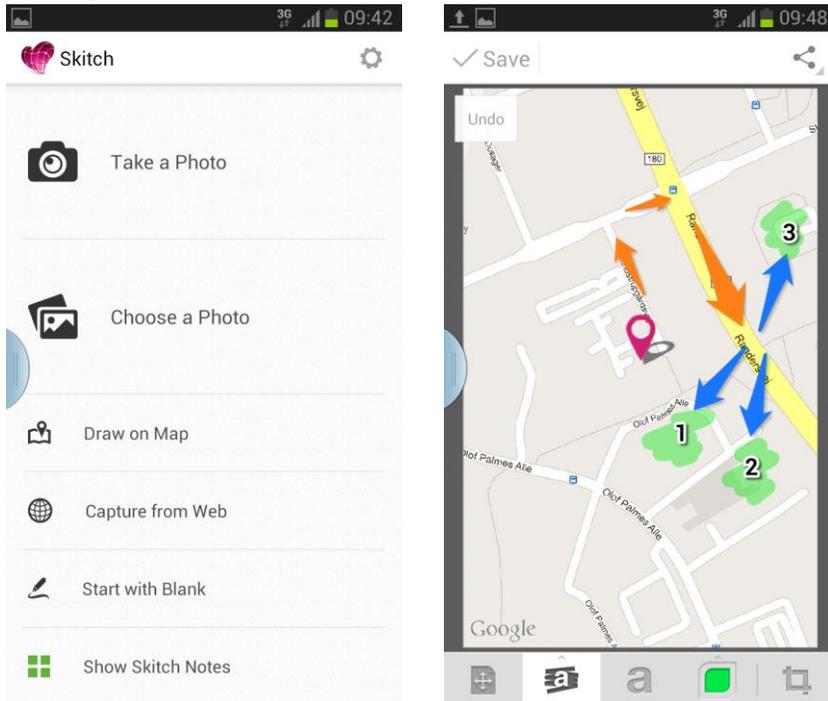
The team uses the free edition meaning they cannot have shared notebooks. Instead they have to share important notes by other means. Luckily Evernote makes it easy - just click the share button and a long list of options appears. This team share notes among each other through Facebook, and they use email to share with the teacher.

‘New Note’ and ‘Audio Note’ are used to **reflect** throughout the project. ‘Skitch’ comes in handy when the team needs to **explore, map** and in the early phases of **make**. As you can see on the following screenshots ‘Skitch’ allows you to e.g.



¹ ‘Skitch’ is actually an app on its own that you need to download. Evernote is allowed to utilize its functions.

Capture from Web or Draw on Map. That means the team can plan and discuss different routes in their community, before leaving the school to investigate if desired locations suit their purpose in the game to come:



Later in the **make** process 'Snapshot' can be used to keep track of different locations. And the snapshots can be annotated to collect ideas about possible tasks or information, that should be connected to a certain location. Taking too many pictures will cause a problem however, since there are limits for amount of data upload (60MB for one month).

After the initial work the team settles on creating a route that makes players pass interesting buildings, statues etc. where they have to make qualified assumptions about volume (based on improvised measuring and using known algorithms).

From all the different notes taken with Evernote only the most important are chosen to base the communication on, when they **ask** and **collaborate** with a similar team from another iTEC school also working on creating a game. They have a discussion about where to make changes before actually making the game for real.

To complete the **make** process the team needs to create the game, and for that purpose they use the Munzee app and munzee.com. The browser version is used to create munzees (printed QR codes to be placed where you want a control in your game). Looks like this when you create one on the website (as you can read, they recommend that a munzee is waterproof, so a good idea is to laminate it):

How would you like to create your munzee?

Do It Yourself

- Create a munzee using the form below
- Print it out from the undeployed tab on your user's page
- Deploy it using the Munzee iPhone or Android app

Friendly Name May be changed later.

Notes

Placement instructions and information.

Create Munzee

IMPORTANT! Each Munzee should be waterproof and able to withstand exposure to all weather conditions. Here is our help manual to assist you with the basics of munzee.

Buy Munzees

Don't worry about doing it yourself and let us make your Munzees for you!



Buy Munzees from the Store

When creating munzees the team gives them a certain name, so players can distinguish these munzees from other munzees, that might be out there.

The app is used to deploy the munzees once you are at the right location - that way the right geolocations are applied automatically. The app is also used to play the game - to direct the players to the right places and give them instructions (see images below - danish munzees).



You can read more about the apps here (and see small tutorials):

Evernote: <https://sites.google.com/site/itectectester/services/evernote>

Munzee: <https://sites.google.com/site/itectectester/services/munzee>