# Viva Questions on MIT App Inventor

1. App Inventor has two main windows. What are they and what do you do with them?

App Inventor's two main windows are Designer and Blocks.

2. The Designer window allows you to add components such as buttons, labels, horizontal arrangements, canvases and image sprites for your app

The Blocks windows allows you to add in coding such as variables and screen initializing so your app will function properly.

3. How do you test an app while you're developing it?

You must have an android device in order to do this. Whilst you're developing your app, you can bring up a QR code by connecting the app via an AI Companion and having it on your device as a result so you can test it to see if it works in the way you want it to.

4. How can you download an app you build to your phone?

You bring up a QR code from the AI Companion as stated above so it will start downloading onto your phone so you can use it.

5. What if you didn't have a phone, but wanted to program some apps. Could you? How?

Yes, you could program an app without having a phone. You could use a PC or a laptop as an alternative. A Gmail account would be required if you want others to see it.

6. There are no Image components in the app, yet a picture appears. Explain.

The image is a property of the button. You don't need to add in an image component into the app when it is easier to have a button component with an image property added into it.

7. One function call in the HelloPurr app requires an argument (also known as parameter). Which function is it and what is the parameter?

The function is when you finish the app and you use it, so you touch the screen and the cat makes a "meow noise". The parameter is how long it will make this noise for.

6. MoleMash has an event that doesn't really fit into the category of user-initiated event or external event. Name it.

Clock.

7. What function blocks can you use to move an image sprite within the canvas? What are the function's parameters?
The function block is the canvas, and the parameters are the X and Y in the properties.

8. If you didn't have a MoveTo block, what blocks could you use to move the mole?
PointInDirection

9. What is the unit of measurement for location on the canvas?
Pixels

10. The X and Y property of an image sprite specify the location of the sprite. But a sprite is not a single point, so what does X and Y really denote?
X and Y denote the starting point of the mole in the app as a fixed point (depending on where you decide to place it before you download it to your device).

11. When a row of blocks is performed, in what order are they performed?
They are performed in the order in which the game is played, e.g. the mole makes a noise when it is hit, which then gives the person playing it a hit point. This also works when you miss the mole, but it adds a point to miss instead of hit.

12. Define persistent data.

Persistent Data is data that is always available, and for it to be this, it must be transferred from short-term memory (a component property or variable) to long-term memory (database).

13. In an App inventor app, how do you store data in short term memory? Long-term memory?

You store data is short-term memory by having a component property or a variable on your app. You store data in long-term data by having a Tiny DB inyour app.

14. In the No Texting While Driving app, what data needs to be stored persistentlyand why?

The custom responses need to be stored persistently so that people who are usingthe app can easily store the data and then easily retrieve it whenever they need it.

15. Give an example of another occasion when data would need to be storedpersistently in an App and why?

Scores/High-scores on a game app.

16. Consider the Screen.Initialize event handler blocks in the No Texting WhileDriving App. If there were no if-block in that event handler, what would happen the first time the app was run?

    If there was no if-block in the app, the first time it was run, there wouldn't be aresponse available for when it is needed or even a value of response.