

UML Diagram

NOTATION:

Yellow box: note

Green box: provided by Android Studio

Dashed line: data binding

View

AppCompatActivity

- virtual onCreate()
- virtual onStart()
- virtual onResume()

MainActivity

- override onCreate()
 - override onStart()
 - override onResume()
- MainActivity simply opens JoystickActivity

JoystickActivity

- override onCreate()
- In charge of databinding and communication with VM

The view is what the user sees and uses to control the system. Activities are like programs.

View

- virtual onMeasure
- virtual onDraw
- virtual onTouchEvent

AppCompactSeekBar

VerticalSeekBar

Overrides the methods above in order to be used as vertical seekbar

Joystick

Custom view component with circle used to control the plane

Main adjustable views we used. There are more native ones.

View Model

BaseObservable

ViewModel

- Private model
- Properties:
 - Ip
 - Port
 - Throttle
 - Rudder
 - Elevator
 - Aileron
- runModel() – runs the private model using ip, port properties

Controls the program. "properties" are updated by the view and passed to model.

Model

Model

- connectToServer(ip, port) – connect and run the app
- Setters (aileron, elevator, throttle, rudder)

ManageConnect

- ConnectAndRun()
- AddToQueue(string) – add instruction to be passed
- StopRun()

Its job is to connect the server and send data given by the view model, when any update is made

Updates via private model