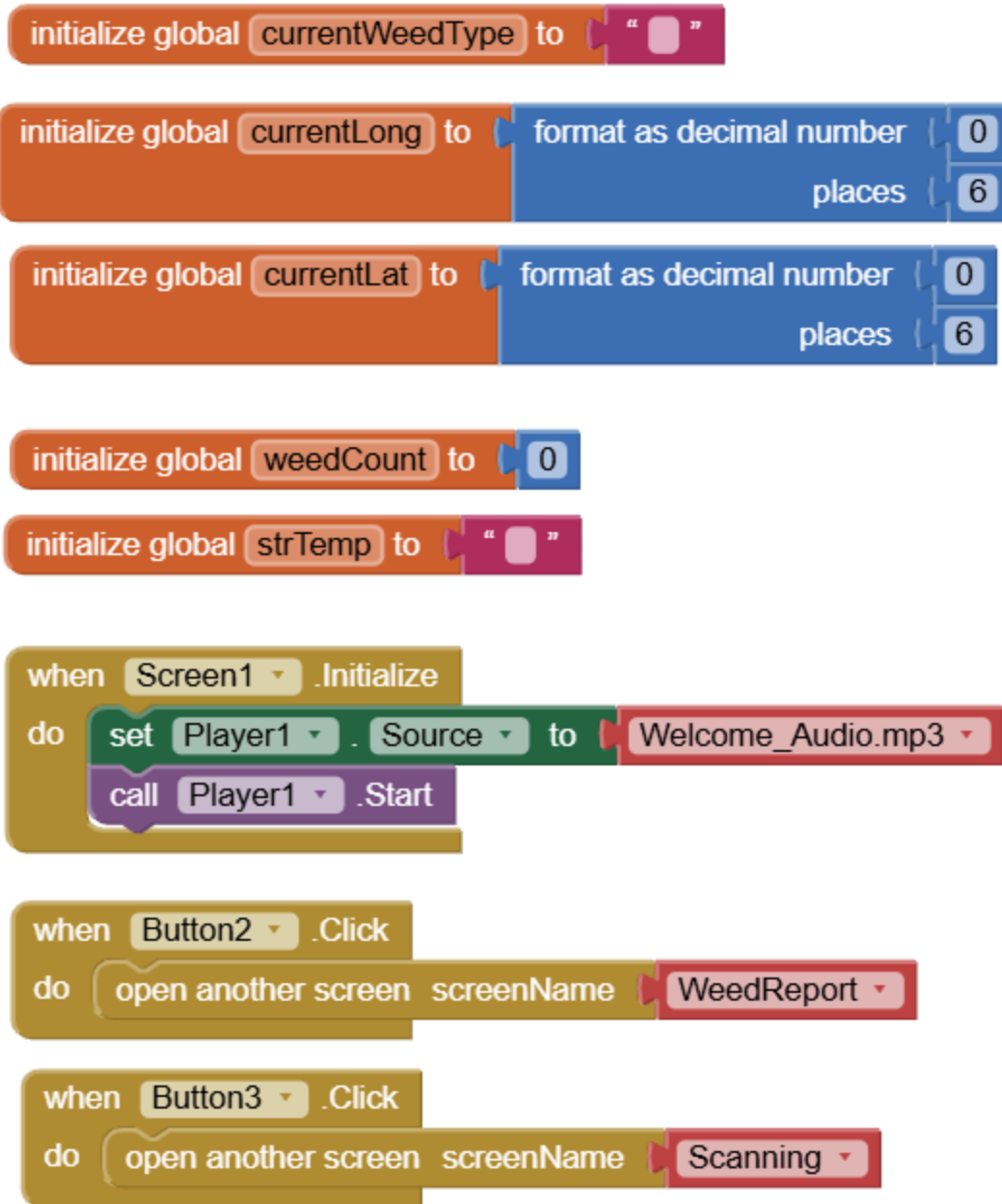
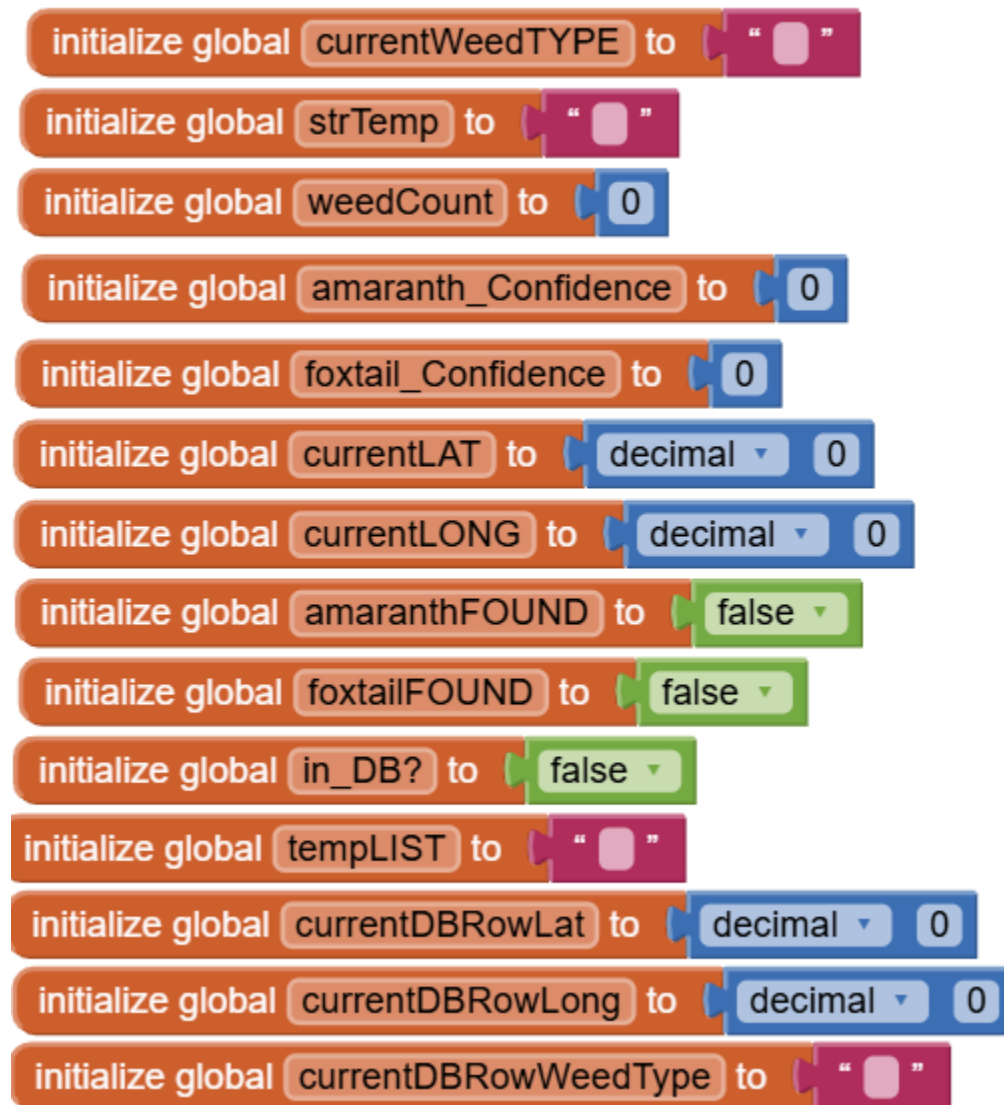


## Code Submission (PDF)

### Screen 1: Initialization



## Screen 2: Scanning & Weed Detection



A series of 14 Scratch 'initialize global' blocks stacked vertically. Each block has an orange 'initialize global' tab, a variable name in a light orange box, the word 'to' in a light orange box, and a value in a colored box. The values are: empty string (purple), empty string (purple), 0 (blue), 0 (blue), 0 (blue), decimal 0 (blue), decimal 0 (blue), false (green), false (green), false (green), empty string (purple), decimal 0 (blue), decimal 0 (blue), and empty string (purple).

```
initialize global currentWeedTYPE to ""
initialize global strTemp to ""
initialize global weedCount to 0
initialize global amaranth_Confidence to 0
initialize global foxtail_Confidence to 0
initialize global currentLAT to decimal 0
initialize global currentLONG to decimal 0
initialize global amaranthFOUND to false
initialize global foxtailFOUND to false
initialize global in_DB? to false
initialize global tempLIST to ""
initialize global currentDBRowLat to decimal 0
initialize global currentDBRowLong to decimal 0
initialize global currentDBRowWeedType to ""
```

```
when Button1 .Click
do
  call TeachableMachineImageClassifier1 .StopWebcam
  open another screen screenName Screen1
```

```
when Scanning .Initialize
do
  call TinyDB2 .ClearAll
  set LocationSensor1 . Enabled to false
```

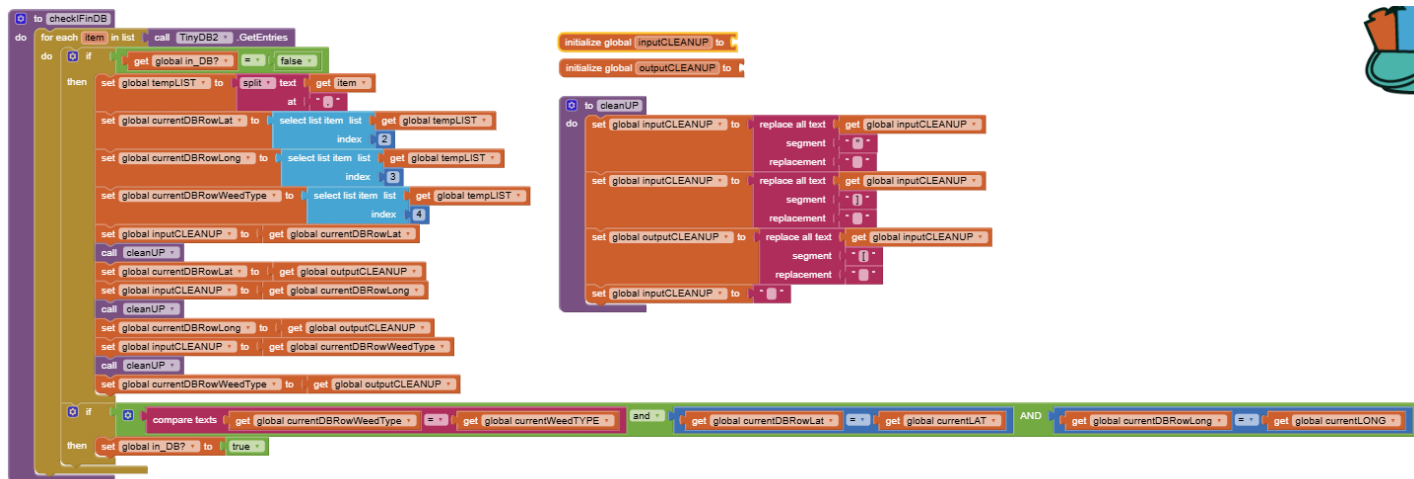
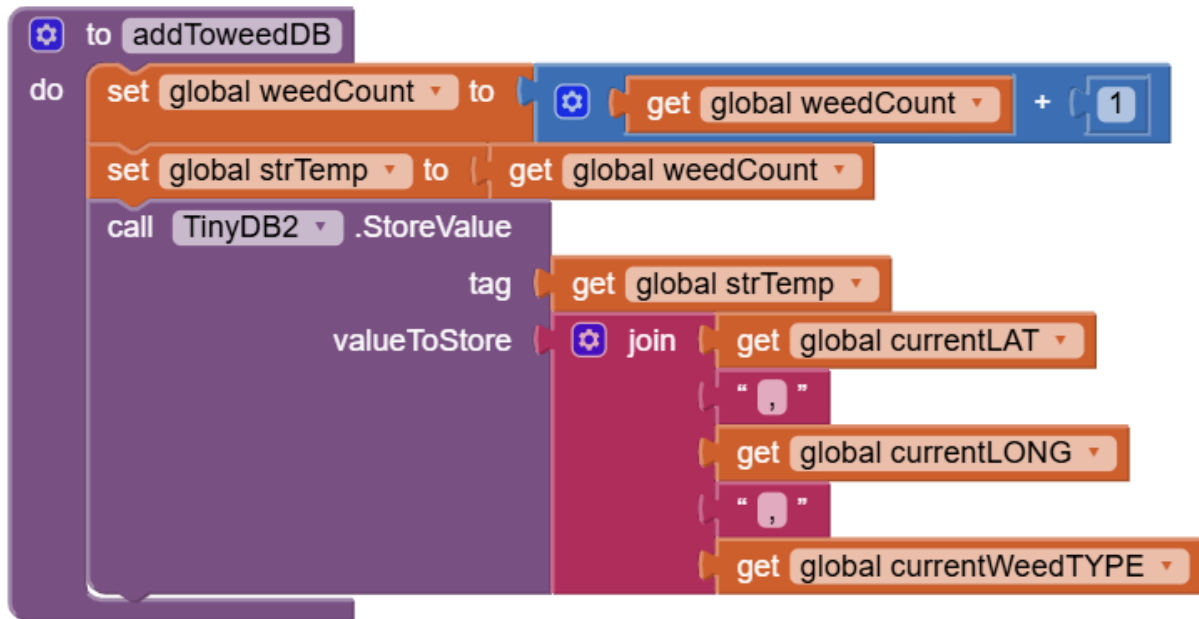
```
when TeachableMachineImageClassifier1 .ClassifierReady
do
  call TeachableMachineImageClassifier1 .ClassifyVideoData
```

```
when TeachableMachineImageClassifier1 .GotClassification
  result
do
  set global amaranth_Confidence to
    get value for key "Palmer Amaranth "
    in dictionary get result
    or if not found "0"
  set global foxtail_Confidence to
    get value for key "Foxtail "
    in dictionary get result
    or if not found "0"
  if
    get global amaranth_Confidence > 90
  then
    set global amaranthFOUND to true
    set LocationSensor1 . Enabled to true
  else if
    get global foxtail_Confidence > 90
  then
    set global foxtailFOUND to true
    set LocationSensor1 . Enabled to true
  else
    call TeachableMachineImageClassifier1 .ClassifyVideoData
```

```

when LocationSensor1 .LocationChanged
  latitude longitude altitude speed
do
  set global currentLAT to format as decimal number get latitude
  places 6
  set global currentLONG to format as decimal number get longitude
  places 6
  if
    get global amaranthFOUND = true
  then
    set global currentWeedTYPE to "AMARANTH"
    set global in_DB? to false
    call checkFinDB
    if
      get global in_DB? = false
    then
      call addToweedDB
      call Sound1 .Vibrate
      millisecs 1000
      set Sound1 .Source to amaranthaudio.mp3
      call Sound1 .Play
    else if
      get global foxtailFOUND = true
    then
      set global currentWeedTYPE to "FOXTAIL"
      set global in_DB? to false
      call checkFinDB
      if
        get global in_DB? = false
      then
        call addToweedDB
        call Sound1 .Vibrate
        millisecs 1000
        set Sound1 .Source to foxtailaudio.mp3
        call Sound1 .Play
      call addToweedDB
    set global amaranthFOUND to false
    set global foxtailFOUND to false
    set LocationSensor1 .Enabled to false
    call TeachableMachineImageClassifier1 .ClassifyVideoData

```



### Screen 3: Storing Values and Plotting on Map

