Weekly Updates

sdmay25-11
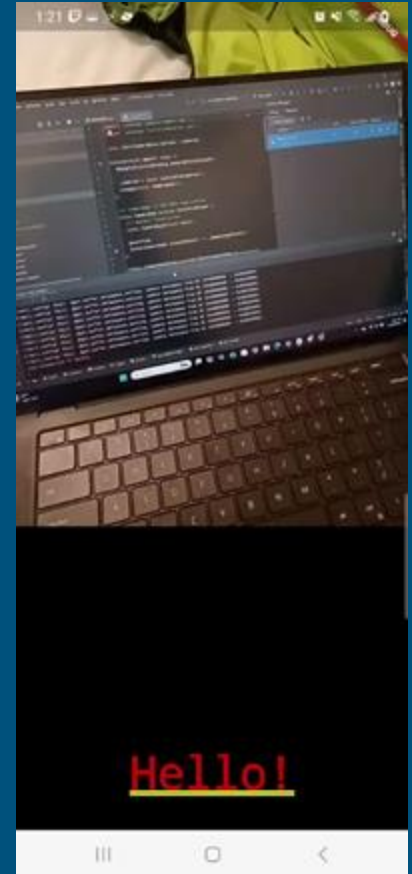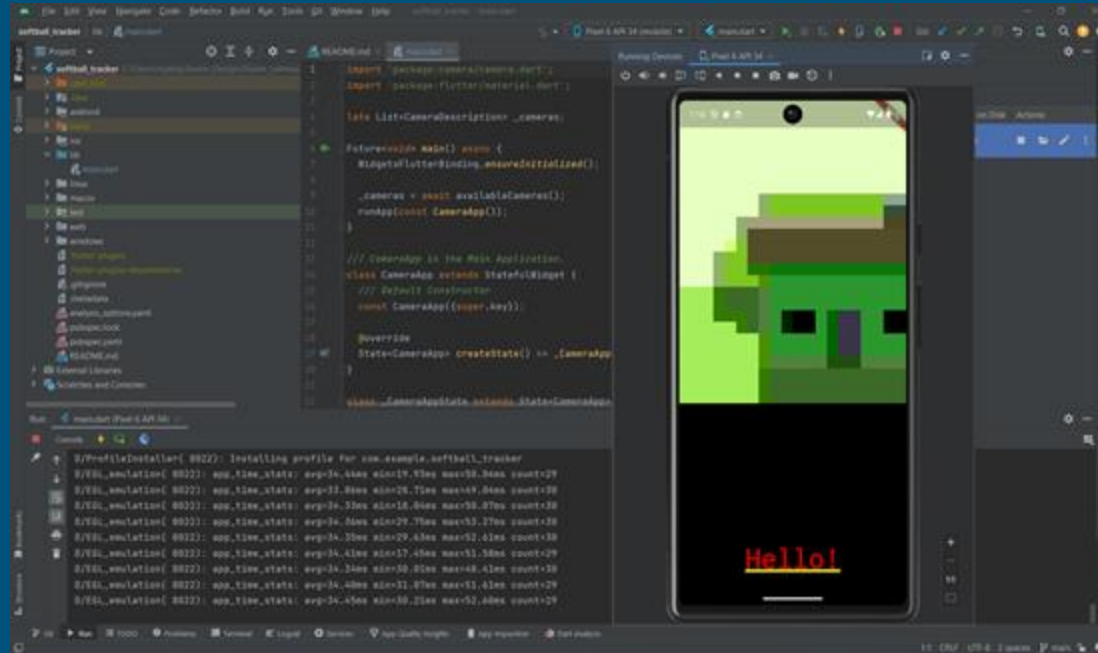Plan for faculty meeting readiness

Casey's Camera Headway

- Overlaying the camera frames with the tracking screen

- Button navigation to Past Pitches and Settings screen
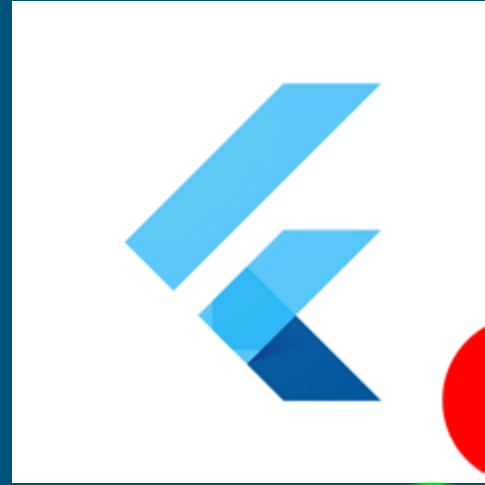
Casey's Camera Headway

Android App running

Our challenges - Integrating OpenCV

- OpenCV is unable to fully run in Flutter
- Our findings
    - C++ code is not supported to directly access the device's camera
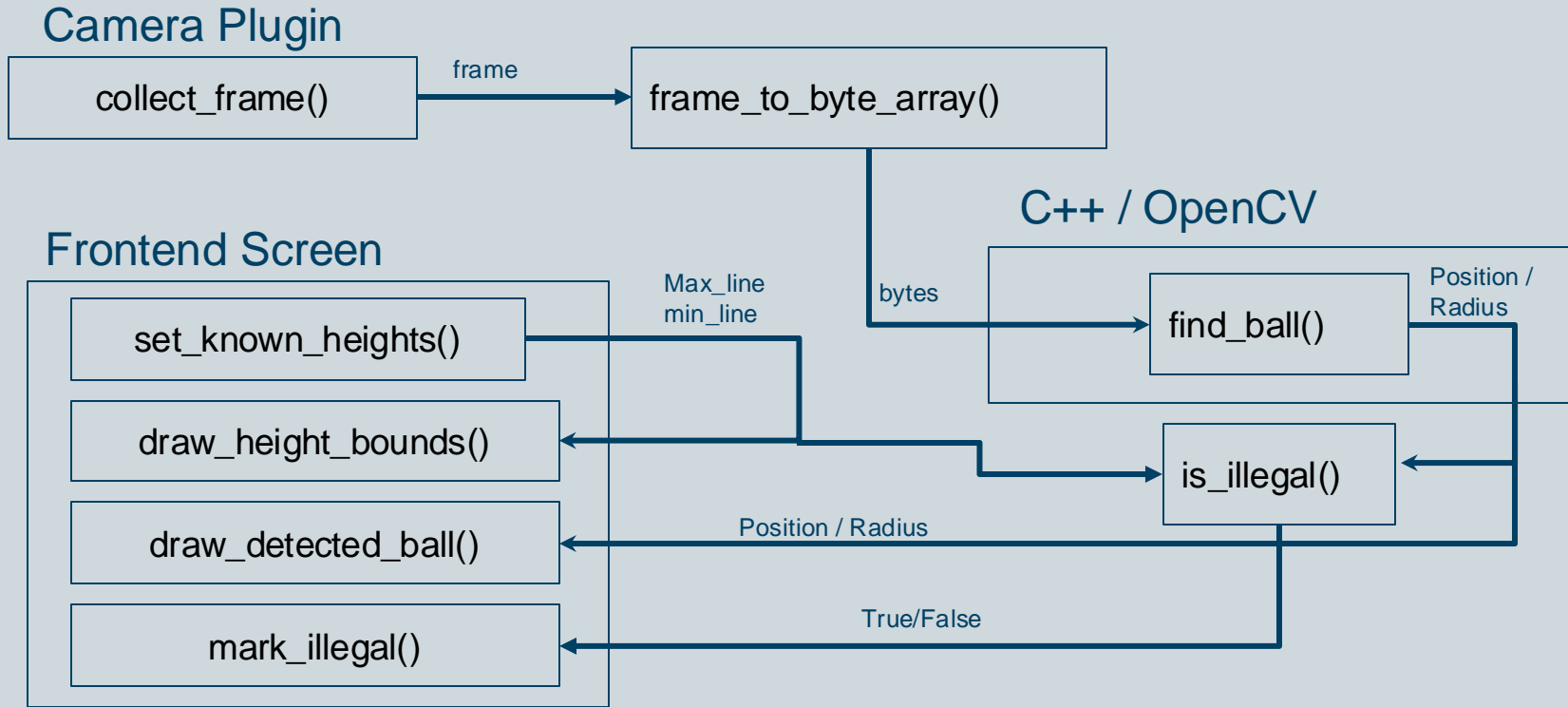   - C++ code can not create a frontend window display

Our Solutions

- Flutter should be dictate user interface operations
    - Finding known heights
    - Displaying max/min heights
    - Displaying the found ball

- C++ should dictate backend operations
    - Frame analyzation
    - Object Detection

Our New Modular Diagram

Plan For 491 Completion

Merge Casey's branch to main

➜   Implement get_known_heights()   (Dart, gridline implementation)

➜   Implement draw_height_bounds()   (Dart, frame overlay)

➜   Pipe collected frames into C++ as a byte array
    ◆   Shrink C++ to only track the ball and return position

➜   Implement ILLEGAL logic

➜   Implement ILLEGAL display/sound

Features/Goals for 492

- Isolate pitch-only detection

- Store clips into Past Pitches

- Color Calibration for the ball

- **Detection Refinement/Improvement**