IMU BASED GAMING GUN

A PROJECT FOR GAMERS

THE GAMING GUN

Introducing the future of gaming, where innovation meets excitement in every frame. Get ready to immerse yourself in a world where control is at your fingertips, precision is key, and victory is within reach. Say goodbye to the limitations of the past and embrace a new era of seamless game-play, where every action is a testament to your skill and strategy. The adventure awaits, so prepare to embark on an unforgettable gaming experience like never before.

AIM OF OUR PROJECT

Imagine a world where your mobile gaming experience is taken to a whole new level. With our cutting-edge mobile gaming gun, you can achieve exceptional precision and accuracy like never before. By seamlessly connecting your mobile device to our innovative gun, you can navigate through virtual worlds with ease, making your gaming experience more immersive and engaging than ever.

THE TECH UTILIZED

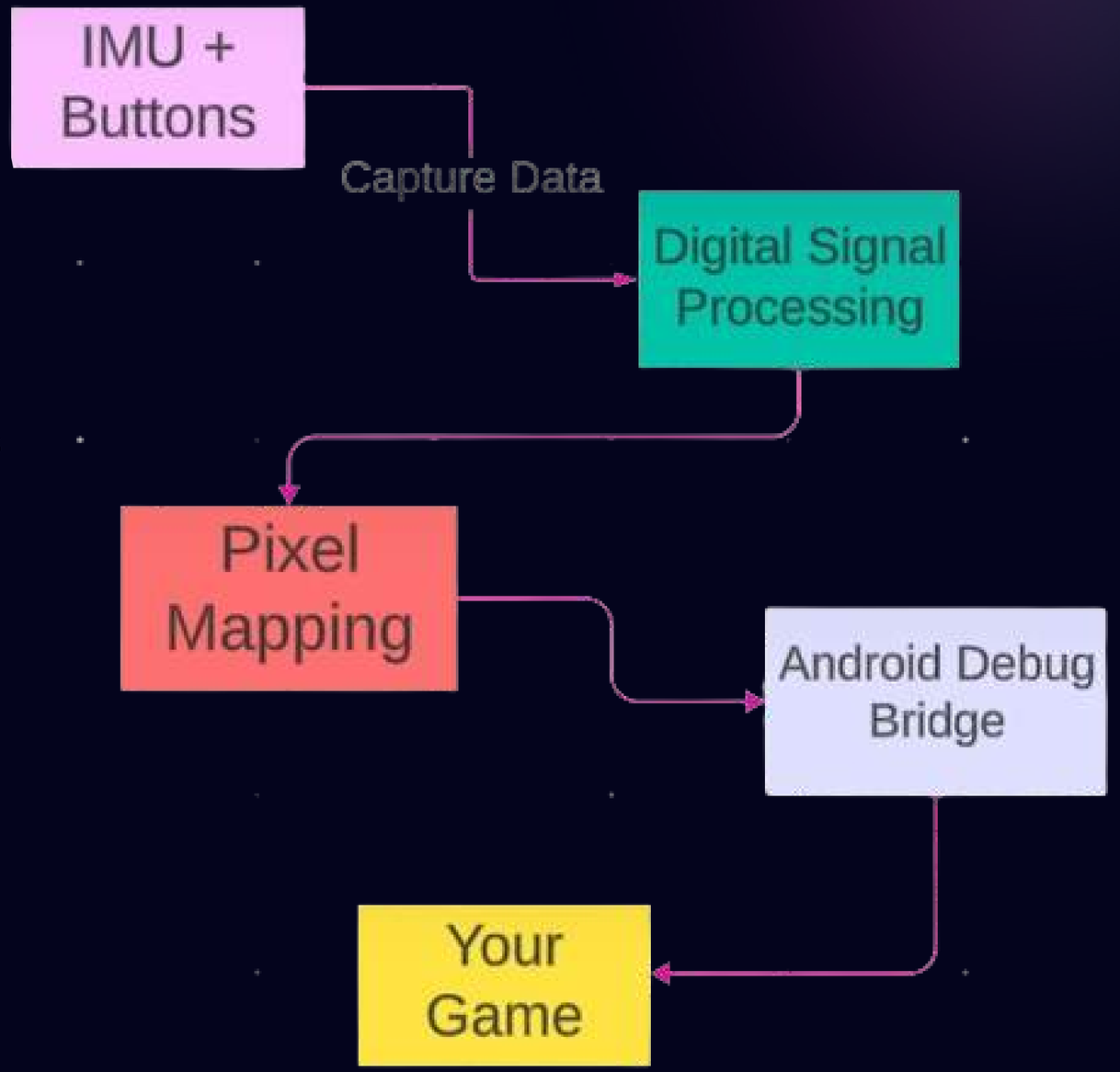
01 RASPBERRY PI 2B

02 9 DOF IMU (9250)

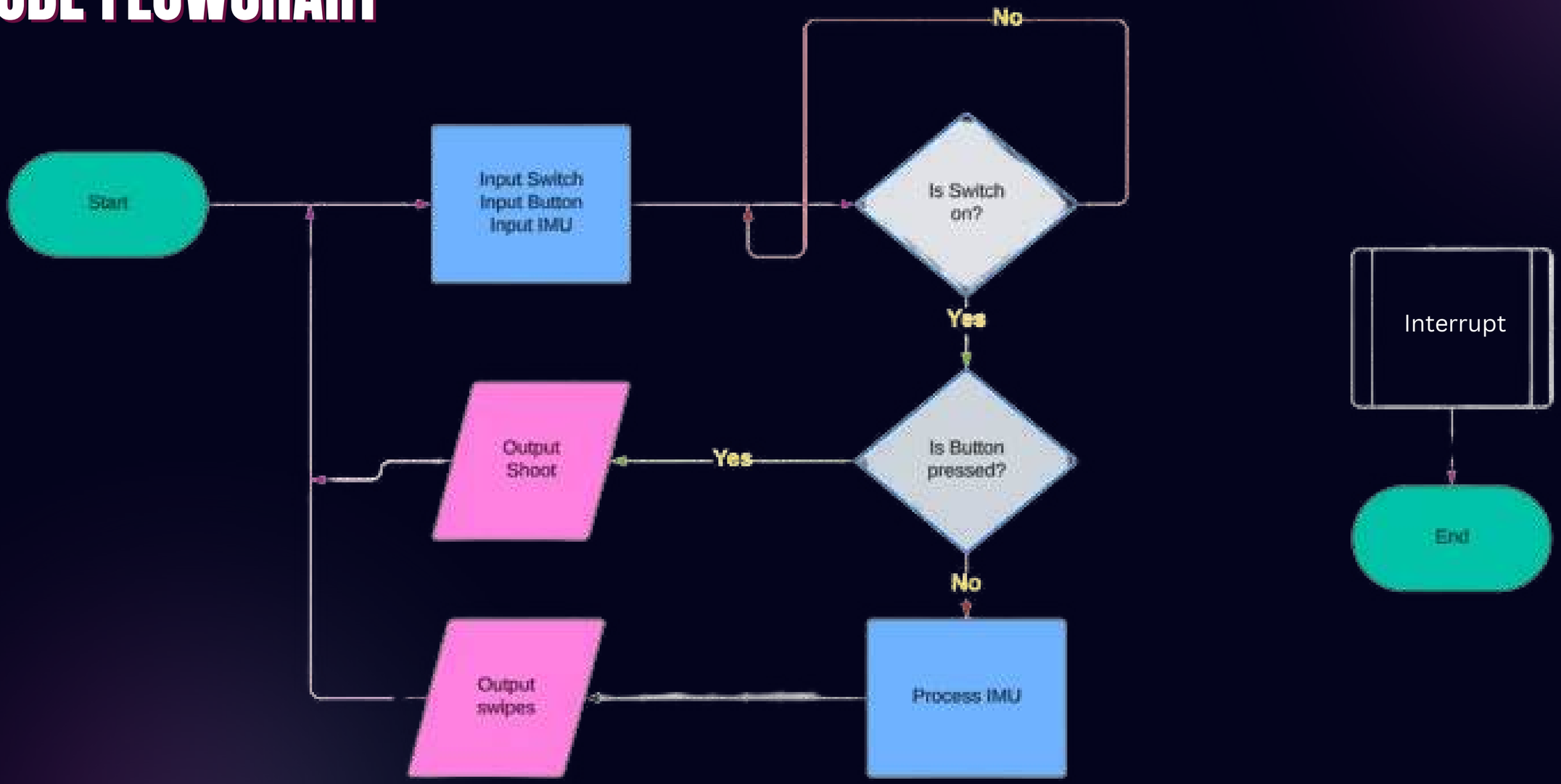
03 GAMING BUTTONS

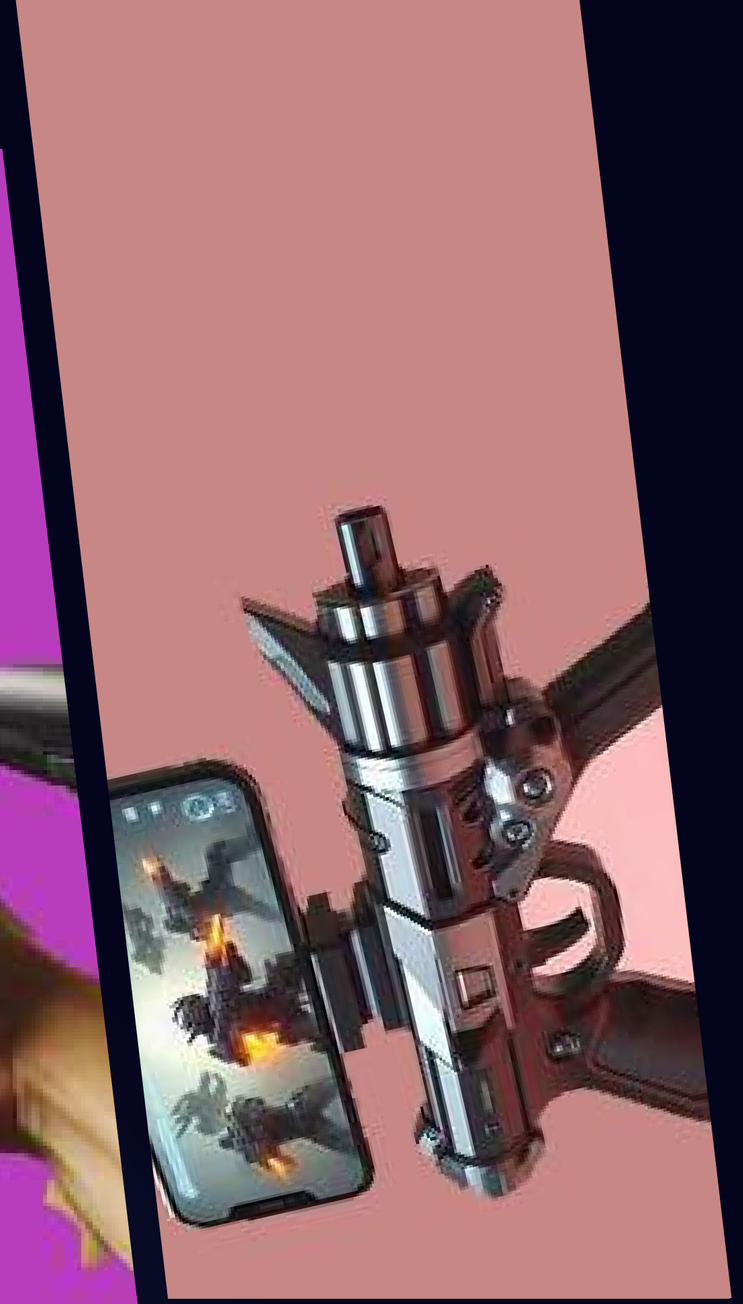
ROADMAP

- We captured noisy data from 9DOF IMU sensors (Accelerometer + Gyroscope + Magnetometer) (MPU_9250)
- After that we sent the data to our raspberry pi which was operating on linux. Using CLI we configured our system to start our python scripts as soon as the RPI powered up.
- We then used various aspects of digital signal processing to reduce the noise of our input signal.
- After we obtained clean results, we converted those results to represent the number of pixels of the display.
- Those pixel values were then used to simulate virtual swipes on the mobile phone using ADB (android debug bridge)
- Buttons were working simultaneously with the same process above except for the fact that the do not need signal processing



CODE FLOWCHART





THANK YOU

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