PROJECT REQUIRED RESOURCES & DEVELOPMENT ENVIRONMENT

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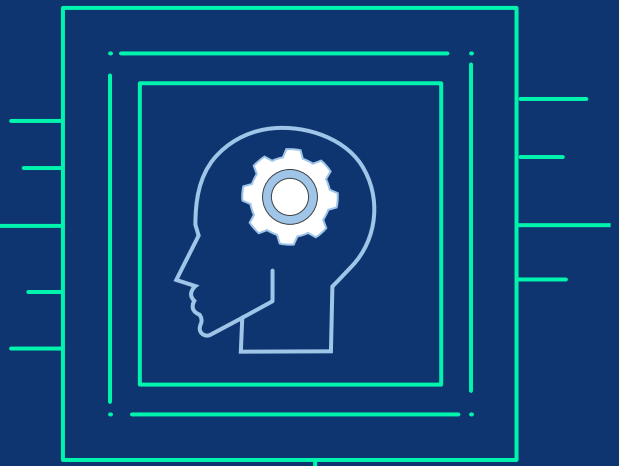
REQUIRED RESOURCES

- Software:
  - Github for source control
  - iOS Developer License
  - Python & Swift
  - Xcode & Visual Studio
- Hardware:
  - Harness
  - (possible) Raspberry pi + attachments
- YOLO (you only look once) Algorithm:
  - YOLOv5s

BASE PROGRAM STRUCTURE

- Based off YOLO algorithm
  - Requires further object training
  - Required accuracy improvement
  - Requires lighting condition improvement

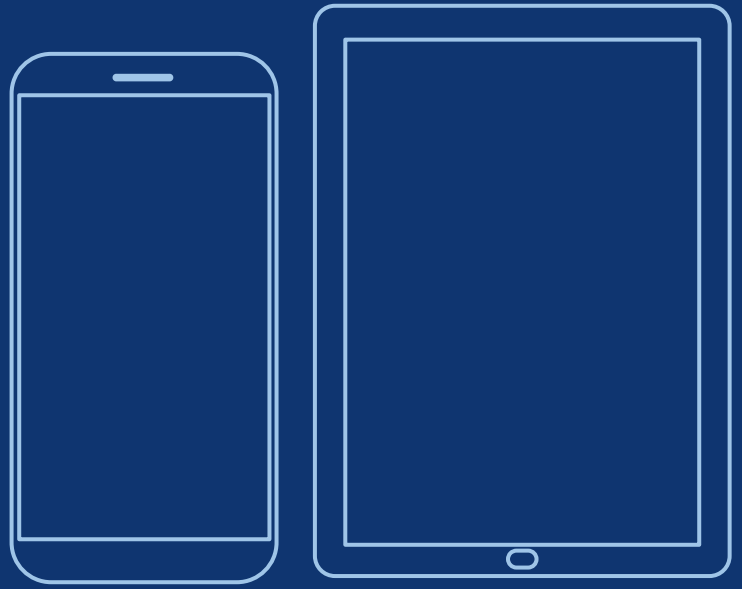


FUTURE

- Detect more relevant objects
- Increase detection accuracy
- Improve accuracy with different lighting

DESIGN

- iOS
  - Simple user friendly interface
  - Design using Xcode
- Raspberry Pi
  - Plug-In-Play
  - Minimal interaction



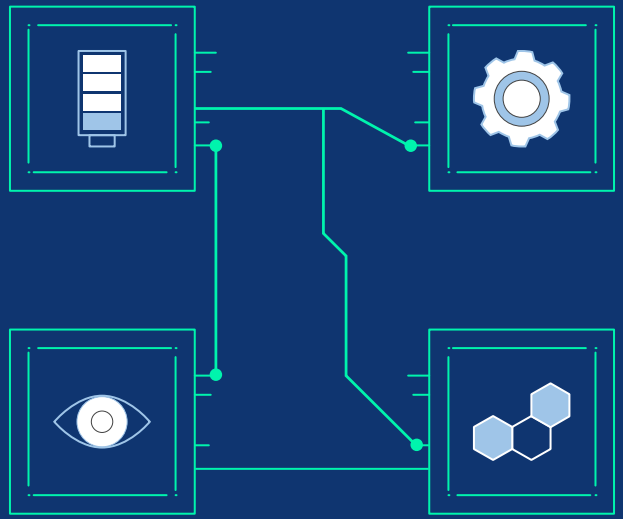
WHAT WE ARE WORKING ON:

JOSE

Project specification and brief.

EDUARDO

Identify defects and resolve bugs.



FRANKIE

Production and technical support.

ENRIQUE

Design, document, and prototype.

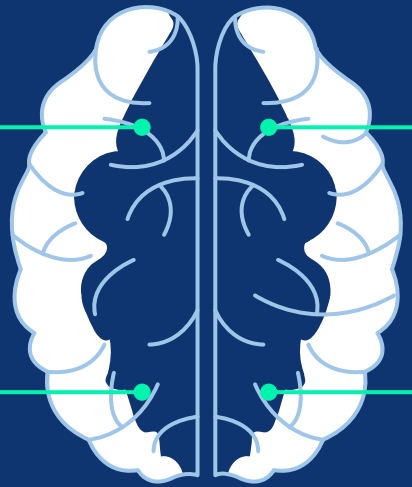
PROJECT STAGES

STAGE 1

Create base program structure for project

STAGE 2

Train algorithm to detect relevant objects



STAGE 3

Modify algorithm to improve accuracy and lighting conditions

STAGE 4

Finalize and maintain algorithm

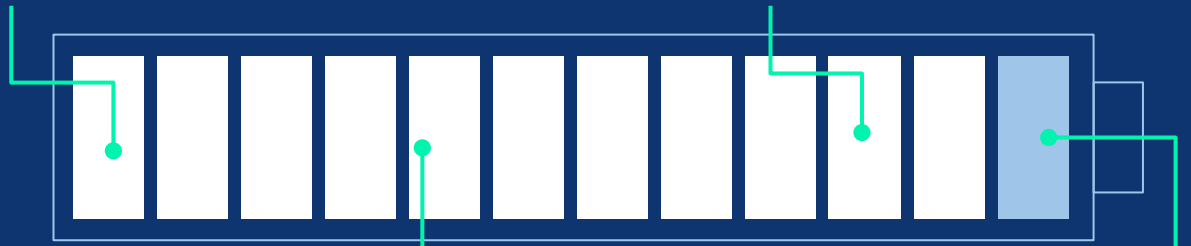
ESTIMATED TIMELINE

NOV. 19, 2021

Base program structure

JAN. 28, 2022

Testing programs accuracy and features



DEC. 10, 2021

Full program completion

FEB. 1, 2022

Start building app/hardware