

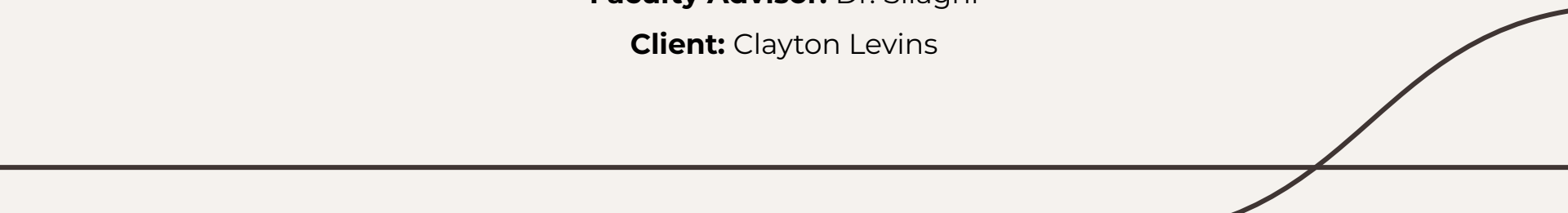


VehID – Milestone Evaluation

Members: Remington Greko, Spencer Hirsch, Thomas Johnson, and Alexis Nagle

Faculty Advisor: Dr. Silaghi

Client: Clayton Levins





Milestone 1

Milestone 1 Progress Matrix

Task	Completion %	Remington	Spencer	Thomas	Alexis	To-do
Familiarize OpenCV and TensorFlow	100%	25%	25%	25%	25%	None
Sprint Planning	100%	25%	25%	25%	25%	None
Training Dataset	100%	20%	40%	20%	20%	None
Collaboration Tools	100%	20%	40%	20%	20%	None
Requirements Doc	100%	30%	20%	30%	20%	None
Design Doc	100%	20%	20%	20%	40%	None
Test Plan	100%	20%	30%	20%	30%	None
Milestone1 Eval	100%	20%	40%	20%	20%	None

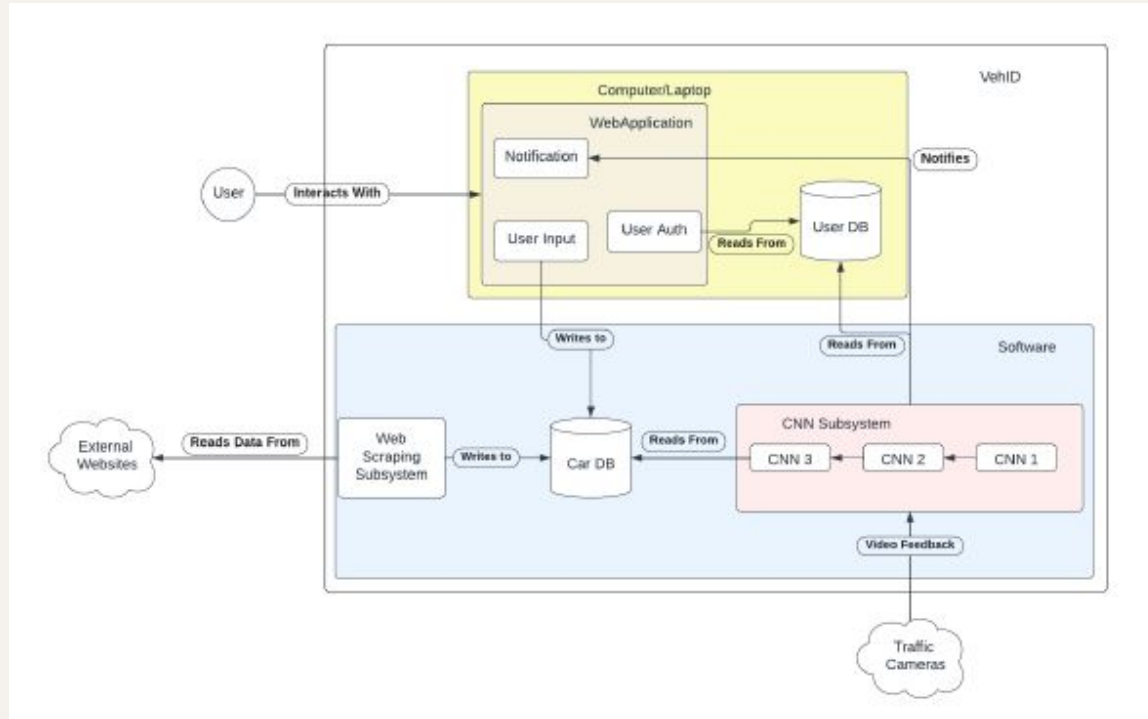
Tasks

- Familiarize with OpenCV and TensorFlow:
 - Researched TensorFlow to better understand composing NN.
 - Researched OpenCV to understand extracting images and bounding boxes.
 - Sprint Planning:
 - To begin the milestone, we broke down the milestone tasks into a sprint.
 - This allowed us to organize our milestones more efficiently.
 - Work on training dataset:
 - Validate the training sets we found.
 - Discovered issues within original license plate dataset.
 - Determine Collaboration Tools:
 - Github
 - Discord
 - To-do-list
 - Google Drive
-

Tasks Cont.

- Create Requirements Documentation
 - Layout system requirements and product functionality
 - Create Design Documentation
 - Broke down product and describes dependencies between different parts of our system
 - Describes intended architecture and dependencies between components
 - Defining functions and purpose
 - Create Test Planning
 - Creating tests for components of system
 - CNN, Web Application, Database, and Web Scraping
 - Milestone 1 Evaluation Documentation
 - Overview of tasks completed
 - Layout tasks planned for upcoming milestone
-

System Architecture



Advisor Feedback – Dr. Silaghi

- We are on task and seemingly making good progress
- Expressed concerns of our test documentation being too broad
 - Redesigned our test cases
 - More specific to the varying functionality of our system
- Expressed concern of over-promising on system performance
 - Following this concern, we revised our promises of product performance
- Provided additional thoughts on our product design
 - Things to keep in mind when creating the CNNs
 - Reusing bounding boxes
 - Processing individual characters in the license plate



Milestone 2

Milestone 2 Tasks

- Data Preprocessing
 - Split Dataset
 - Create Convolutional Neural Network for Color Recognition
 - Hyper-parameter tuning
 - Sprint Planning
 - Milestone 2 Evaluation
-

Task Matrix - Milestone 2

Task	Remington	Spencer	Thomas	Alexis
Split Dataset	20%	30%	20%	30%
Create color recognition Model	25%	25%	25%	25%
Hyper-parameter tuning	30%	30%	20%	20%
Data preprocessing	20%	20%	30%	30%
Sprint Planning	25%	25%	25%	25%
Milestone Evaluation	25%	25%	25%	25%



Questions?