

MICHIGAN STATE
UNIVERSITY
Beta Presentation

**Image Recognition, Annotation and
Validation Mobile Application
The Capstone Experience**

Team Whirlpool

Shruti Avutapalli

Jessica Clappison

Jackie Li

Savanna Pinkoski

Jack Turak



*From Students...
...to Professionals*

Department of Computer Science and Engineering
Michigan State University
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Project Overview

Problem:

- Lack of realistic training photos to achieve high object recognition accuracy.

Project Objective:

- Improve Yummly's image recognition data model.
- Collect annotated photos from Whirlpool employees.
- Evaluate correctness of annotations through validation interface.

System Architecture

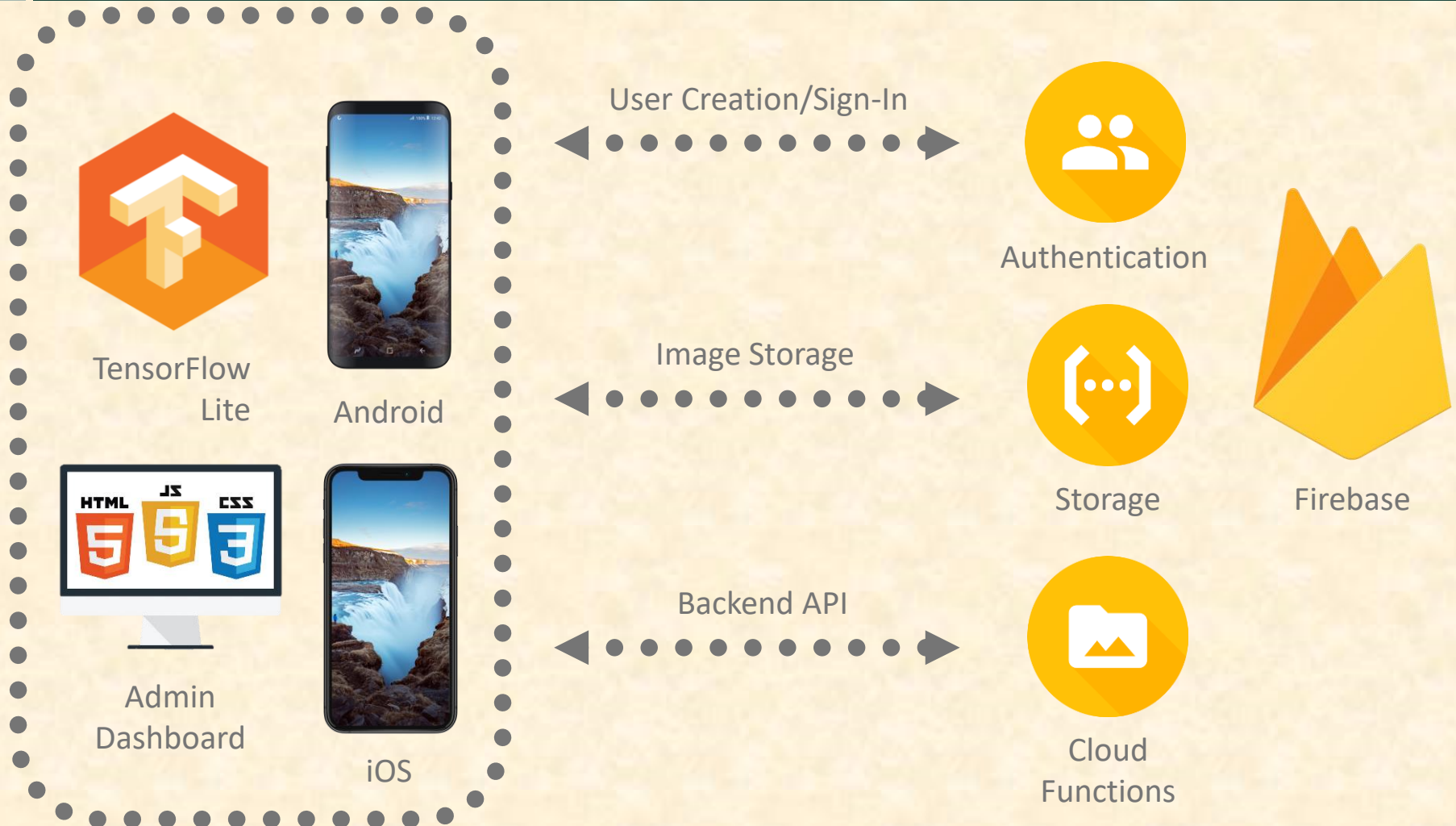
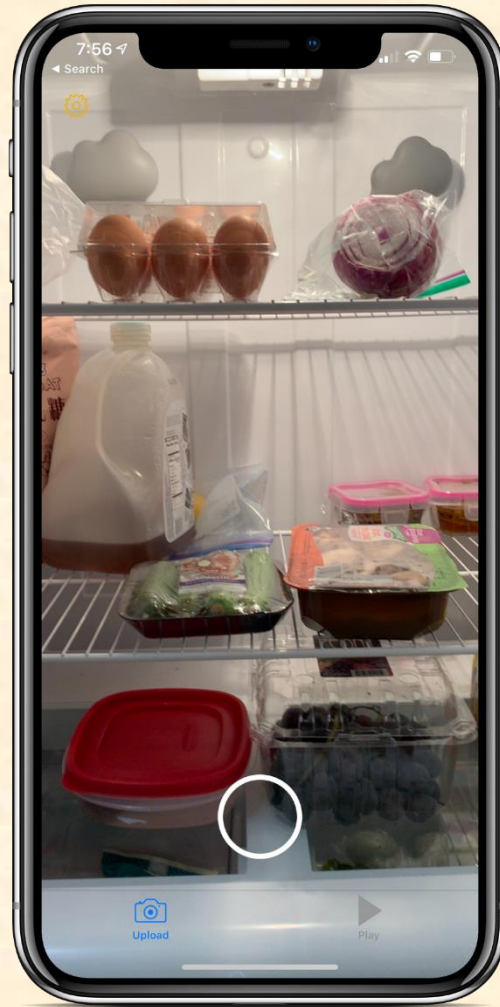
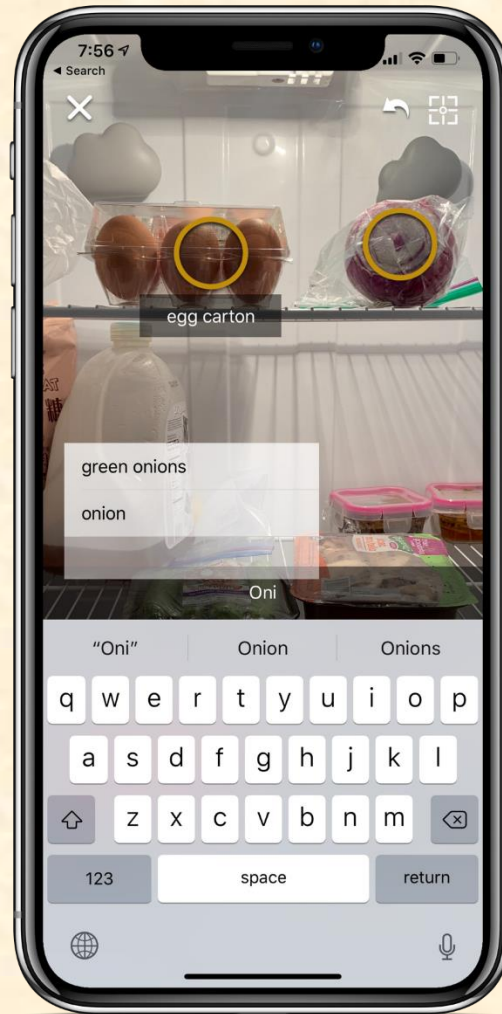


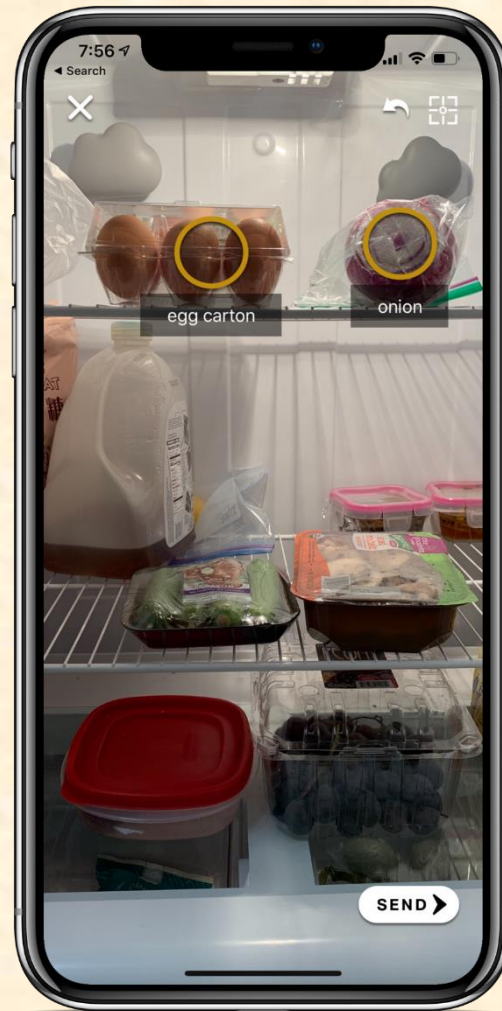
Image Capture Interface



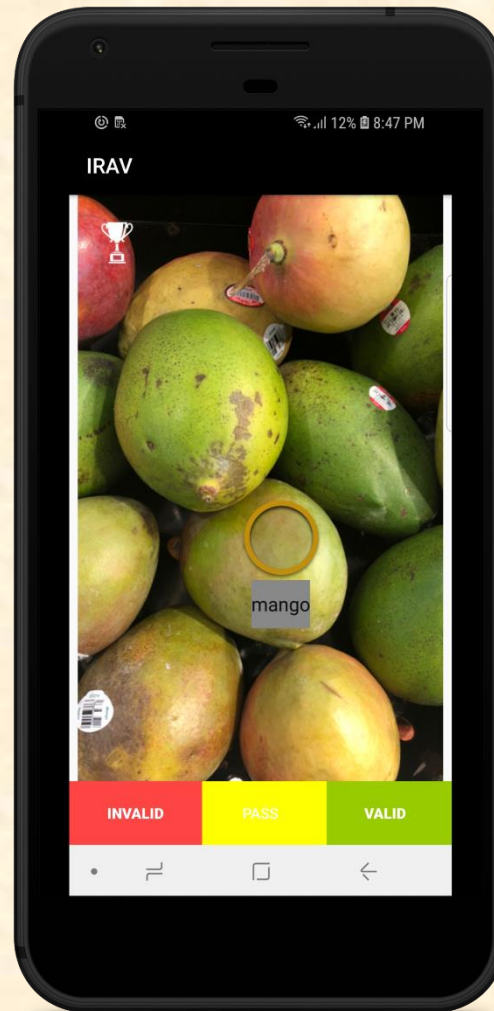
Annotation Interface



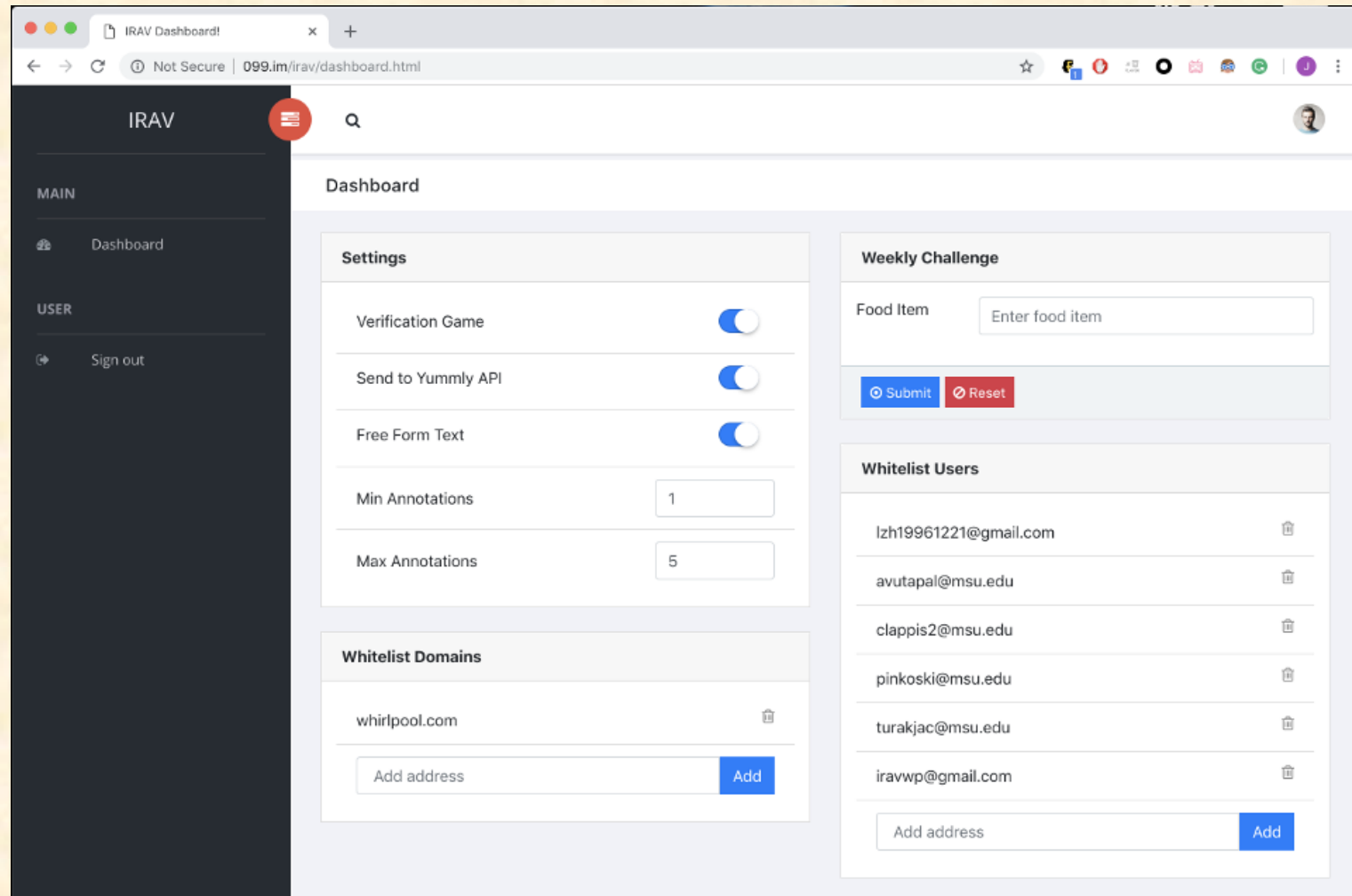
Annotation Interface: Completed



Validation Interface



Admin Dashboard



The screenshot displays the IRAV Admin Dashboard in a web browser. The browser's address bar shows the URL `099.im/irav/dashboard.html`. The dashboard features a dark sidebar on the left with the 'IRAV' logo and navigation links for 'MAIN' (Dashboard) and 'USER' (Sign out). The main content area is titled 'Dashboard' and is divided into three sections. The 'Settings' section on the left includes toggle switches for 'Verification Game', 'Send to Yummly API', and 'Free Form Text', all of which are currently turned on. Below these are input fields for 'Min Annotations' (set to 1) and 'Max Annotations' (set to 5). The 'Whitelist Domains' section at the bottom left shows a list with 'whirlpool.com' and an 'Add' button. The 'Weekly Challenge' section on the right has a text input for 'Food Item' and 'Submit'/'Reset' buttons. The 'Whitelist Users' section on the right lists email addresses: 'lzh19961221@gmail.com', 'avutapal@msu.edu', 'clappis2@msu.edu', 'pinkoski@msu.edu', 'turakjac@msu.edu', and 'iravwp@gmail.com', each with a delete icon. An 'Add' button is at the bottom of this list.

IRAV

MAIN

Dashboard

USER

Sign out

Dashboard

Settings

Verification Game ☒

Send to Yummly API ☒

Free Form Text ☒

Min Annotations

Max Annotations

Whitelist Domains

whirlpool.com

Weekly Challenge

Food Item

Whitelist Users

lzh19961221@gmail.com

avutapal@msu.edu

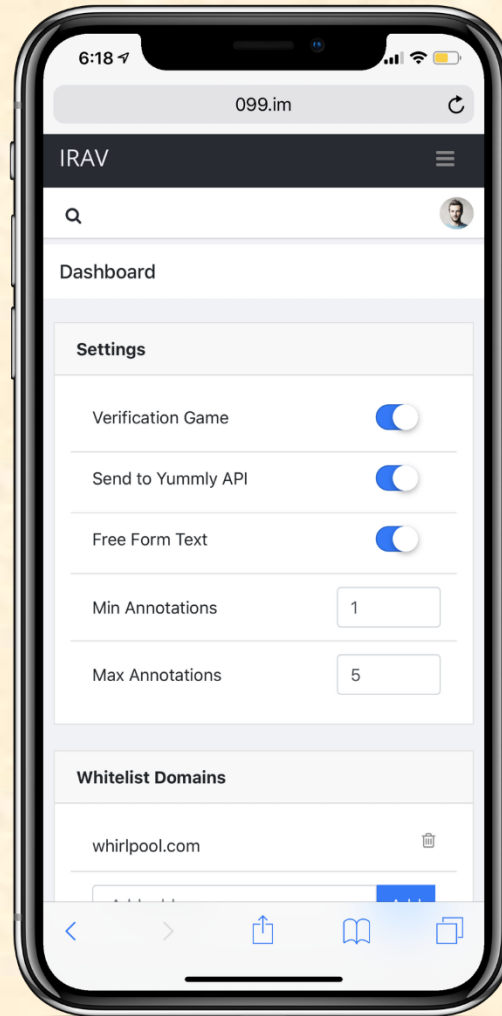
clappis2@msu.edu

pinkoski@msu.edu

turakjac@msu.edu

iravwp@gmail.com

Admin Dashboard



What's left to do?

- Testing
 - User feedback
 - Bug fixes
 - Edge cases
- UI Design Finalization
- Documentation

Questions?

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