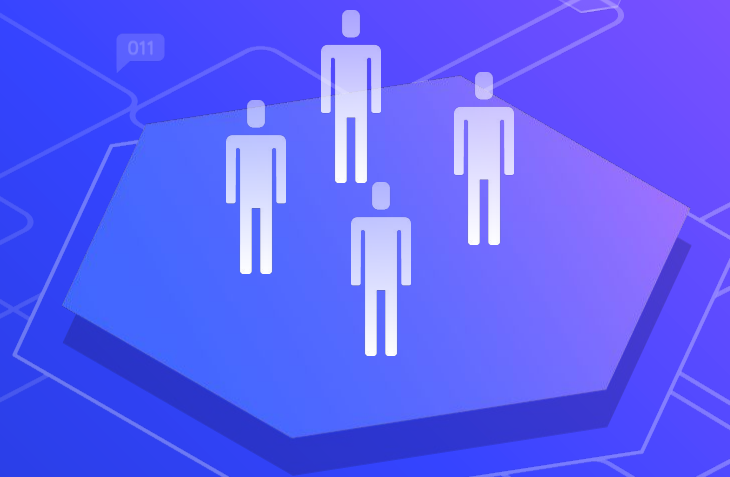# Dashboard Proposal Presentation

Presentation Overview

- Introductions
- Project Overview & Goals
- Project Approach
- Potential Problems
- Learning Expectations
- Timeline/Gantt Chart
- Questions

Introductions

Jianna Orias

Major: Computer Engineering

Role: Back-end
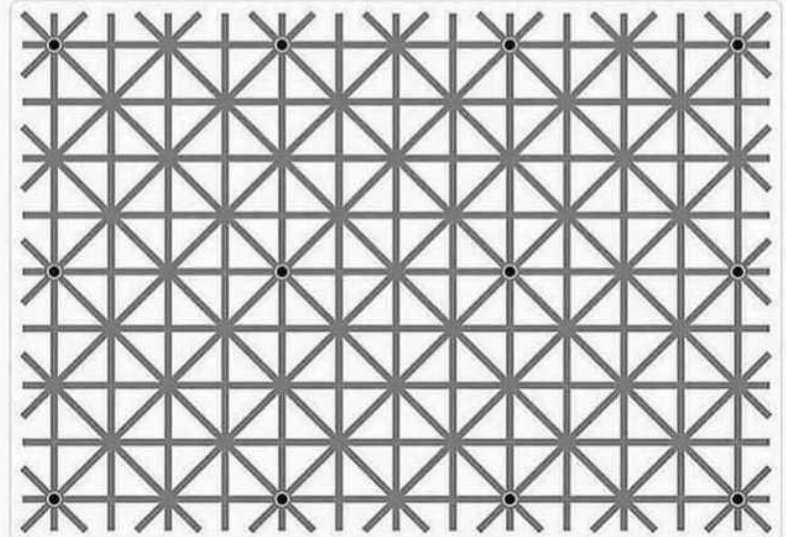
Project: EE / ENGR 496

Andrew Salazar

Major: Computer Engineering

Role: Back-end

Project: EE / ENGR 496

There are twelve black dots at the intersections in this image. Your brain won't let you see them all at once.

Kevin Liu

Major: Computer Engineering

Role: Front-end

Project: EE / ENGR 496

Jonathan Tu

Major: Computer Engineering

Role: Front-end

Project: EE / ENGR 496

Project Overview & Goals

Project Overview & Goals

- Translate Dashboard from pure Semantic-UI HTML/CSS to ReactJS
- Develop back-end code to link to front-end code
- Develop a simple database to store data from weatherbox
- Present data correctly onto dashboard
- Deploy dashboard website to a server

Approach & Current Progress

Overall Block Diagram

Individual Weatherboxes
- Apple
- Bumblebee
- Cranberry
- Guava

Server

Landing Page

Individual Weatherbox Pages
- Apple
- Bumblebee
- Cranberry
- Guava

Dashboard

Design Procedure

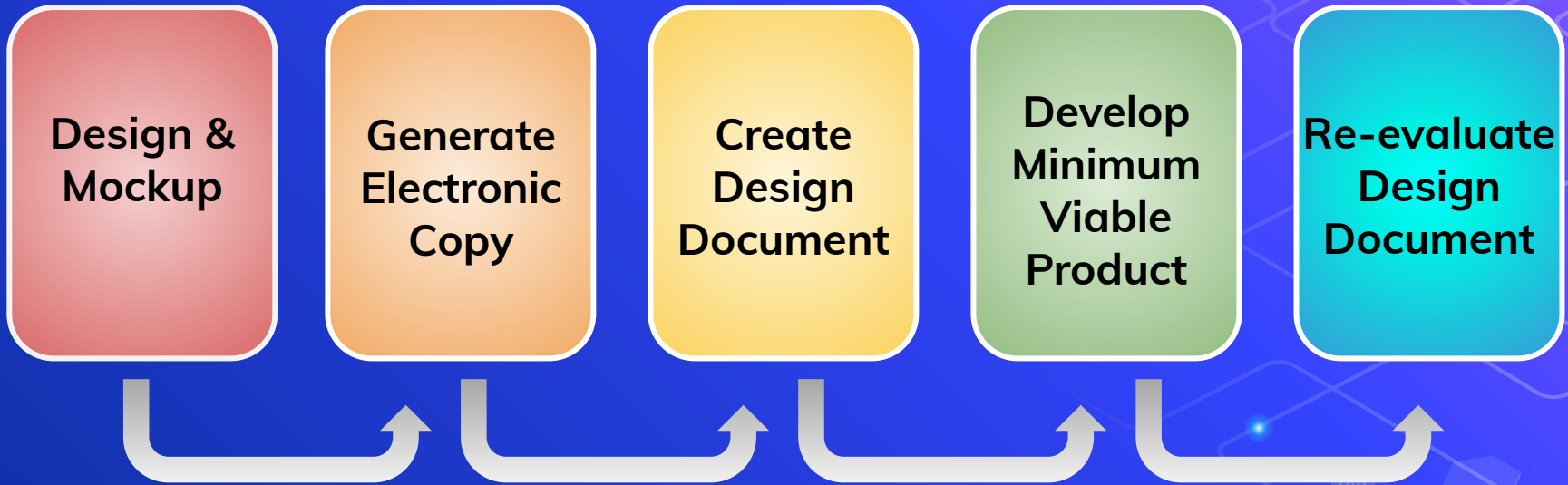| Design & Mockup | Generate Electronic Copy | Create Design Document | Develop Minimum Viable Product | Re-evaluate Design Document |
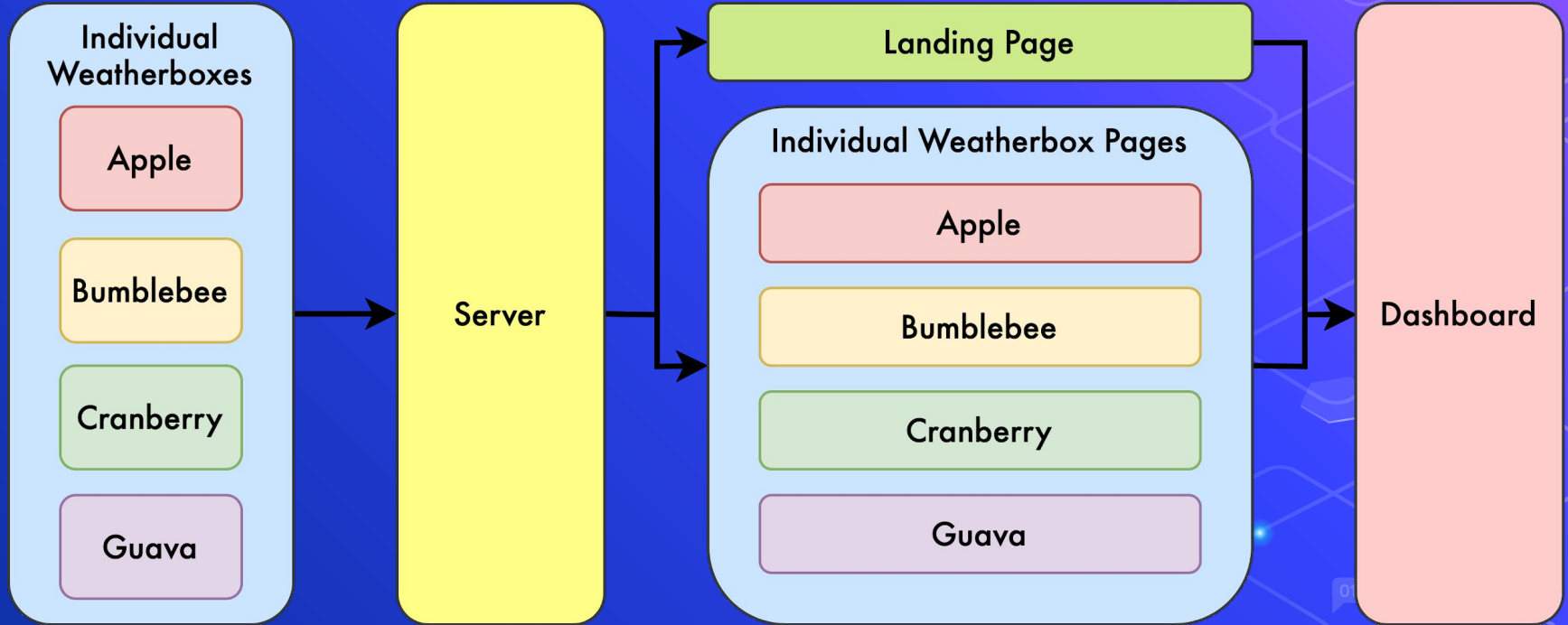
Approach

- React components makes the UI
  1) Reusable / Adaptable
  2) Cleaner / Simpler
- Online tutorials for new frameworks
  · SQL/MySQL
  · Django
- **Focus on back-end this semester**
- Understand weatherbox data collection into gateway
- Division of labor and tasks
  · Switch around for front-end, back-end functionalities

Current Progress

⬡ New repository created for translating previous Dashboard → ReactJS
  · Each member working on creating the Dashboard components
    · Menu/NavBar
    · Graph (shows independent value over time)
    · Averaged Values
    · Map

Potential Problems
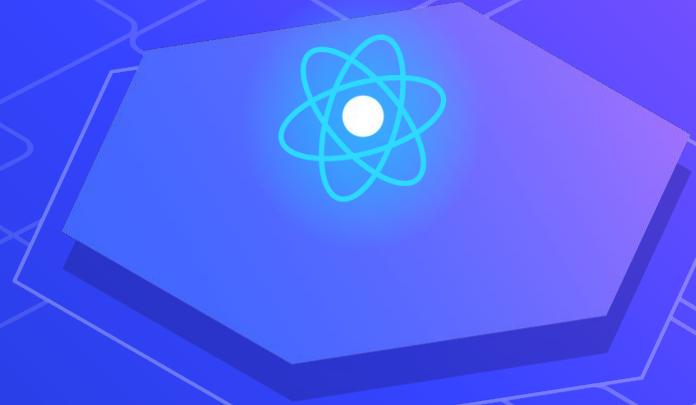
Potential Problems

- Steep learning curve
  - SQL/MySQL (Database)
  - Django (Back-end)
  - Integrate everything together
- Time Management
- Accessing SCEL server data
  - Communication with Firmware for database access
- Deployment of the Dashboard
  - Meteor? Another platform
  - Choosing a database hosting server

Learning Expectations
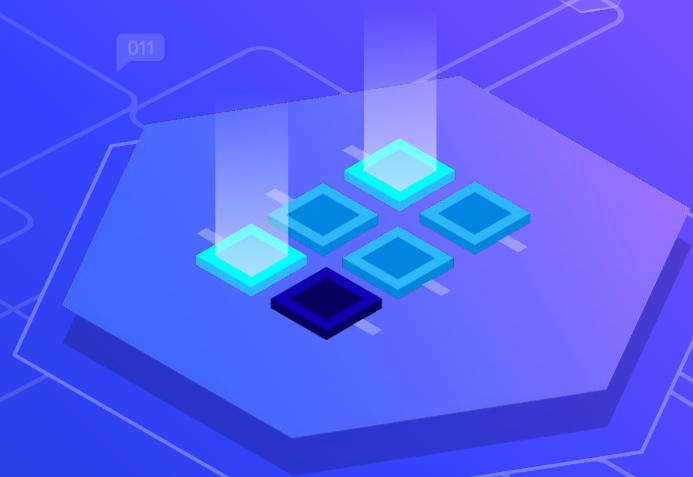
Learning Expectations

- Code Frameworks
    - ReactJS (familiarize again)
    - SQL/MySQL
    - Django
- Problem Solving Skills
- Communication Skills
- Able to access and manage data from the SCEL server
- Gain some knowledge on full-stack development

Gantt Chart

eek				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1
ate				20-Jan	27-Jan	3-Feb	10-Feb	17-Feb	24-Feb	2-Mar	9-Mar	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr	20-Apr	27-Apr	7-May	14-Ma
esentation/Final Report																				
Proposal																				
Preliminary Design Review																				
Critical Design Review																				
Final Presentation																				
Final Report																				
esearch/Tutorials																				
Django																				
SQL																				
Refresh on Semantic UI React																				
ashboard																				
Convert current UI to use Semantic UI React																				
Work with Firmware Team on Database																				
Integrate front-end with back-end																				
Deploy dashboard																				

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Questions?

Extra resources