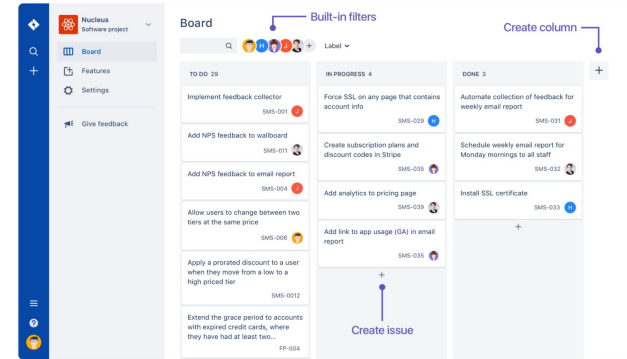


# Project Management

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# Why

- An organized project serves as your blueprint
- Can list out all the requirements and constraints
  - Try to foresee any obstacles and open questions
- Break down large tasks into smaller tasks
  - Can add more details to the smaller tasks
- It clears your brain space to focus on implementation
- Can estimate each task and give a sense of overall progress
- Point people to the project to get real-time status update



JIRA Board

# Common Project Management Methodologies

Every place tracks work. Every place tracks work differently. Most places use a variation of these methods.

- Agile / Scrum
  - A more formal method. Work is divided into 2-3 week “sprints”. You’ll have sprint planning at the beginning and retrospectives at the end. Good for larger, multiple teams coordinating.
- Kanban
  - Less formal. More dynamic. To-do column with highest priority at the top. In progress and done column too. Good for smaller teams with ad-hoc tasks.
- Linear (new and hip)
  - Artisanal Agile / Scrum. Focused on flexibility and individual ownership. Needs team to agree on how to best utilize this new method.
- Google Docs / Sheets (keep it simple)
  - Honestly, a great way to start. Write down everything in a Google Doc. Once you’re done, copy and paste into the tracker of your choice.

# Software Providers

Agile / Scrum

- [JIRA](#)

Kanban

- [Trello](#)

[Linear](#)

Note: Don't spend too much time picking one. It's the work that's important. This is just a tool.

# Example Time!

Project: Create an iPhone app to recognize coffee beans as I roast

Stretch goal: Calculate average pixel value of the window and display on screen

How did I come up with this?

I found this blog post on adding an object detector in SwiftUI

<https://www.neuralception.com/detection-app-tutorial-detector/>

The blog post is really thorough so I felt confident in trying myself.

I noticed it used a local YOLOv3 model so maybe I can fine-tune it.

<https://blog.roboflow.com/training-a-yolov3-object-detection-model-with-a-custom-dataset/>

Maybe it'll work?

# Breaking it down

1. Connect iPhone to XCode
  - a. Making this a separate task because it requires setup, download, and maybe restarting
2. Create a project and setup Part 1: setting up a live camera feed
  - a. I'm thinking this will take a while since I'm new to this. Maybe I can break this down.
3. Proceed to Part 2: Adding an object detection model
  - a. Same as above so budget more time
4. Fine tune the YOLO model
  - a. Get sample images to fine tune with
    - i. Record a video, separate frames to get images
  - b. Use Roboflow to fine-tune
5. Incorporate new model into the project

# Estimating

1. Connect iPhone to XCode - **2 points / 2 hr(?)**
  - a. Making this a separate task because it requires setup, download, and maybe restarting
2. Create a project and setup Part 1: setting up a live camera feed - **8 points**
  - a. I'm thinking this will take a while since I'm new to this. Maybe I can break this down.
3. Proceed to Part 2: Adding an object detection model - **8 points**
  - a. Same as above so budget more time
4. Fine tune the YOLO model
  - a. Get sample images to fine tune with - **2 points**
    - i. Record a video, separate frames to get images
  - b. Use Roboflow to fine-tune - **4 points**
5. Incorporate new model into the project - **2 points**

**Overall: 26 points**

# Timeline

Feb 26 - Planing (prob started a little)

March 4 - Spring Break

March 11 - Midterm Presentations

March 18 - 8 hrs

March 25 - 8 hr

April 1 - 8 hr

April 8 - 8 hr

April 15 - 8 hr

April 22 - 8 hr

April 29 - Prep for presentations

May 6 - Presentation week

1 hrs = 1 point

$6 * 8 = 48$  hrs = 48 points

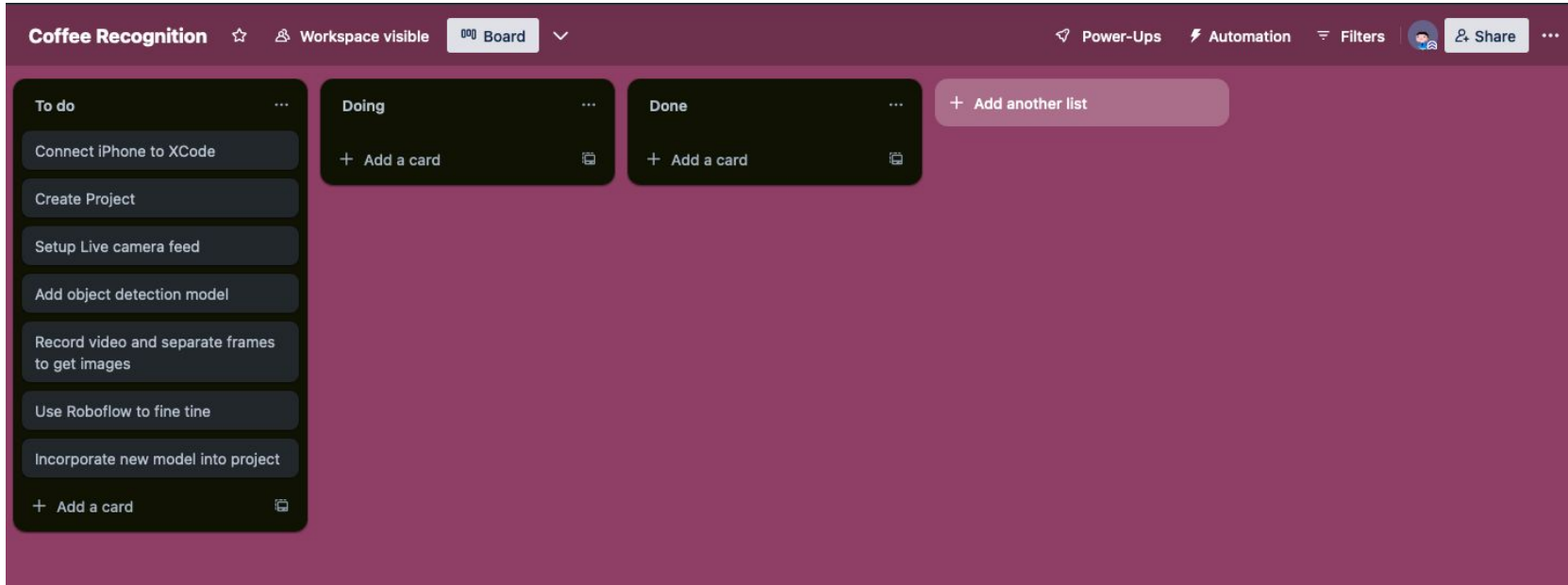
Things always take twice as long:

$48 / 2 = 24$  points

We estimated earlier the project to take 26 points. 24 is pretty close. I'm down to know I'll have to work a little more to complete the project by the end of course.

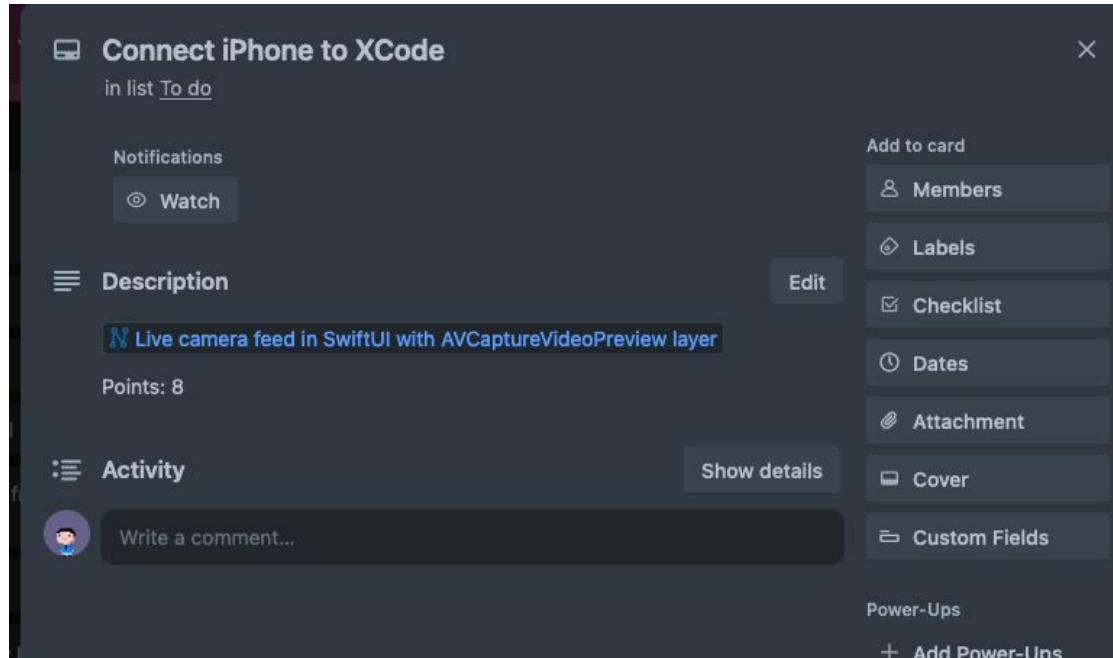


# Trello



Some places use [User Story](#) template

# Trello ticket details



Some places use a standard of “If you give this to someone unfamiliar with the project, can they get this done?”

# Result

<https://www.linkedin.com/feed/update/urn:li:activity:7099809091593666561/?origin=TrackingId=1rn1WR83Q%2FeBtcfn83gvPg%3D%3D>