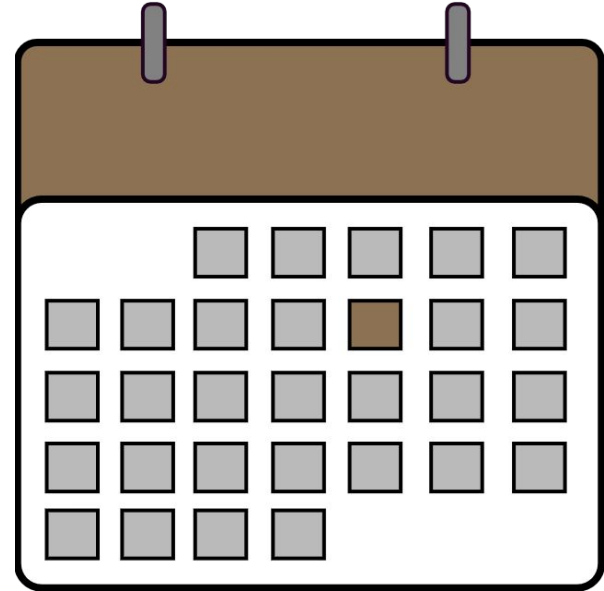# Design Review #1

TA Scheduling and Management System

Team Magisters

Andrew Liddell   Joe Domabyl V

Junjian Yin   Daniel Drake

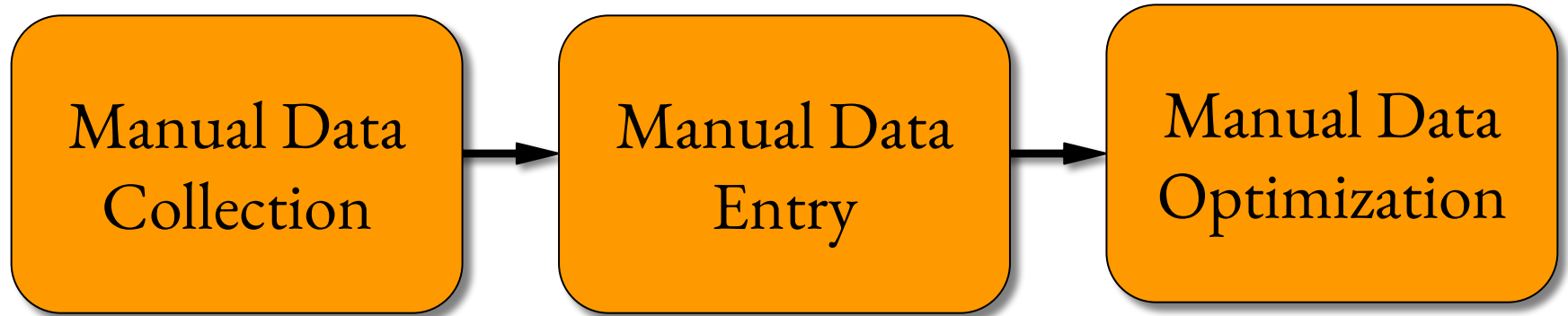# Volodymyr (Vova) Saruta

Doctor Fofanov

- Associate director for graduate programs at SICCS
- Associate lab coordinator for bioinformatics labs

Problem Statement

Manual Data Collection → Manual Data Entry → Manual Data Optimization

Solution Overview

Mass Email → TA's Enter Own Data → Assisted Optimization

Key Requirements

- How did we arrive at these requirements?
  - Primarily via meeting with the client
  - Specification document (MVP)
  - Internal discussion
- Domain requirements
  - Different user accounts
  - Modifiable TA attributes
  - Schedule Overview
  - Modifiable schedule
  - Quick organization and scheduling of TA's

Functional Requirements

- User-based authentication and permissions
- TA scheduling optimization
- GUI renders data state
- Account configuration/setup
- Data management system
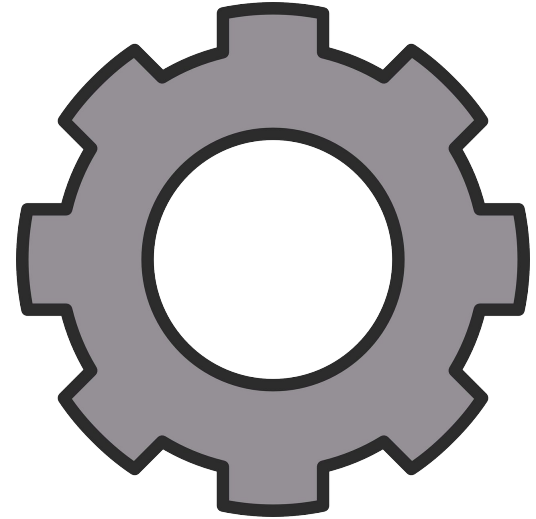
Lab Organizer Pool

Lab Organizer Object

Semester Pool

Lab Object

TA Pool

TA Object

Nonfunctional Requirements

- Security
- Look-and-feel
- Modularity
- Sensitive Data Anonymization
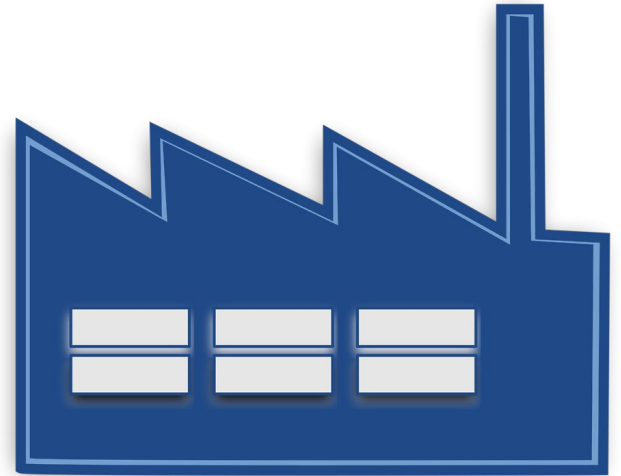
Risks and Feasibility

Risk	Severity Score	Likelihood Score
Wrong Email Recipient	**Low**	**Low**
Django-Redis Library	**High**	**Medium**
Unreliable TA Evaluation	**Medium**	**High**
Inefficient GUI Workflow	**Low**	**Low**

Risks and Feasibility Cont'd

Potential Mitigations:

- Malleable TA information
- Bug patches
- Tabbed environment

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
Team Standards				■	■	■										
Team Inventory				■	■	■										
Tech Feasibility							■	■	■	■	■					
Requirements Specification										■	■	■	■	■	■	
Prototype Django Environment										■	■					
Prototype App Layout												■		■		
Prototype Algorithm														■	■	■
Prototype Database												■		■		
Design Review 1											■	■				
Project Intro Video													■	■	■	
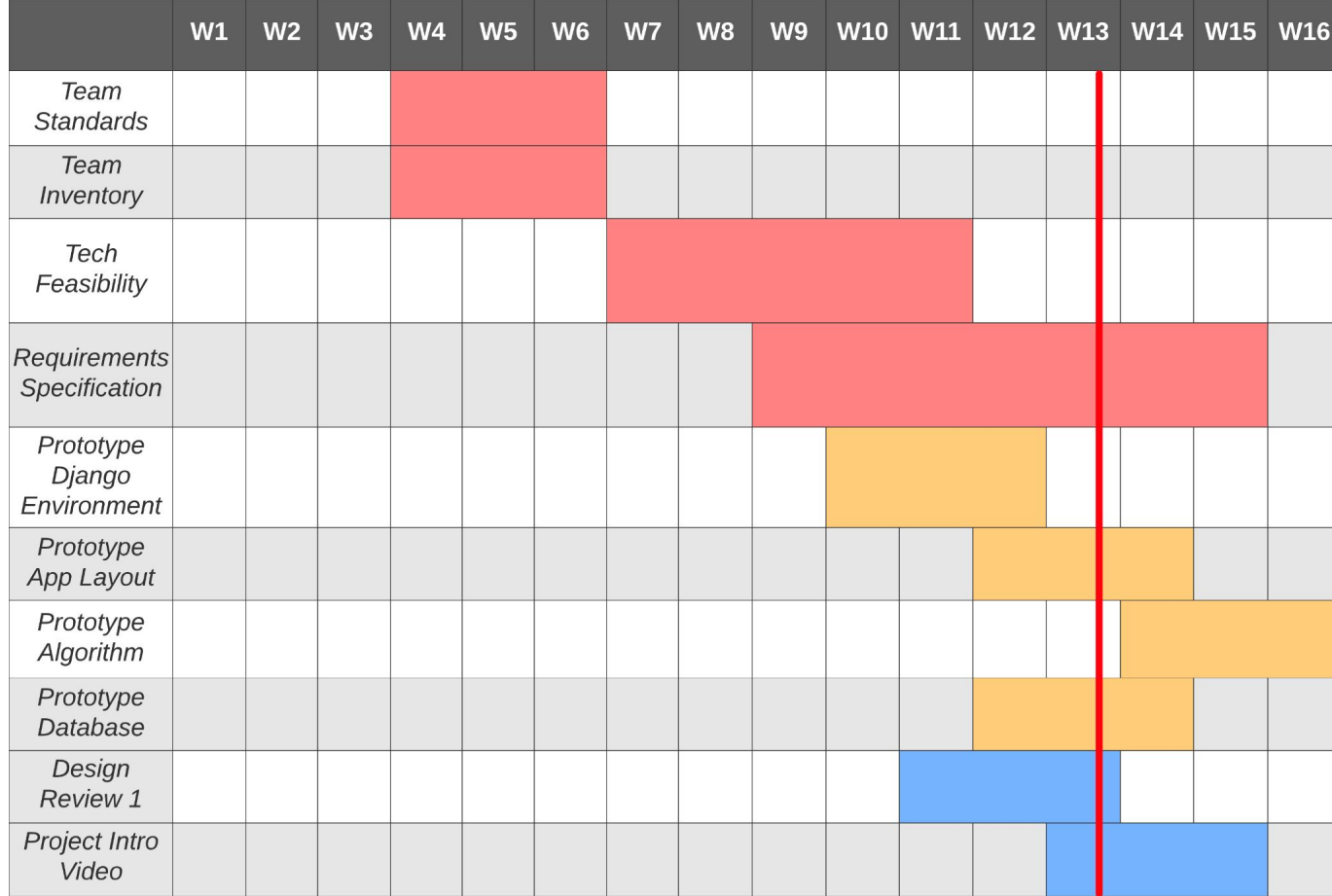
■ Document   ■ Prototype   ■ Presentation

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
Software Design		■	■	■	■											
Design Review 2						■	■	■								
Fully Integrated Prototype								■	■	■	■					
Software Testing Plan									■	■	■					
Design Review 3											■	■	■			
Capstone Poster													■	■		
Final Presentation													■	■		
Final Report													■	■		
Final Product														■	■	

■ Document   ■ Prototype   ■ Presentation

Conclusion