

# ELRC: Sprint 3 Retrospective (3/18 - 3/29)

## 1. Team Roles

### Customer

Dr. Beverly Irby Dr. Matthew Etchells

### Product Owner

Brandon Nguyen

### Scrum Master

Yi-Ting Lee

### Developers

Yi-Ting Lee Minseo Park

Andres Santiago Jacob Mathes

Brandon Nguyen Chengyuan Qian

### 1.1. Contributions

Name	Points	Percent Share
Brandon Nguyen	5(+3)	26%
Yi-Ting Lee	5(+3)	26%
Chengyuan Qian	2	6%
Andres Santiago	3	10%
Jacob Mathes	5	16%
Minseo Park	5	16%

## 2. Project Summary

This project is the start of a journey to bring the Synergistic Leadership Theory, a modern take of leadership theory, into a practical and interactive web application. The mission is to develop a platform that not only educates on the theory but also allows users to access leadership effectiveness through The Organization and Leadership Effectiveness Inventory (OLEI).

Stakeholders include Drs. Beverly Irby and Matthew Etchells, alongside a team of students committed to transcending traditional, male-dominant leadership paradigms. The platform will feature an animated, interactive tetrahedral model representing the theory's core factors: Leadership Behaviors, Organizational Structure, External Forces, and Attitudes, Values, and Beliefs. This tool will facilitate a deeper understanding of leadership dynamics but also generate personalized leadership style analysis.

## 3. Sprint Achievements & Backlog

### 3.1. Goal

The goal for this sprint was to flesh out the application by integrating different parts of the application into a streamlined user experience. Additionally, we aim to incorporate a user authentication system in order to personalize and persist information about previous responses and analyses.

### 3.2. Achievements

In this sprint, we accomplished the goal by utilizing a third party API in auth0 to provide the user authentication system. With this, we overhauled the user profile system by attaching a profile for each unique auth0 user which enabled persistence across multiple clients. Finally, there is now a straightforward user interface which enables potential users to quickly sign up, create a profile, and take the survey.

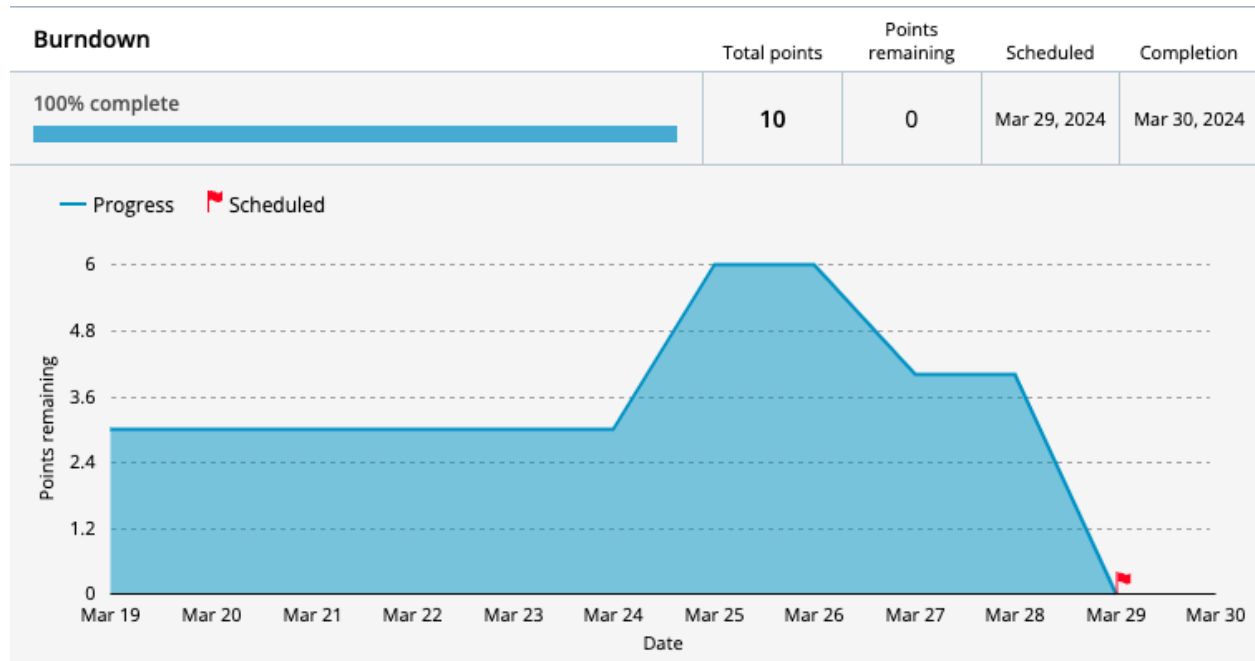
### 3.3. Selected User Stories

- Feature 15: Auth0 - User Session & Authentication
  - Points: 3
  - Assigned To: Andres Santiago Jacob Mathes Minseo Park
  - [As a] Interested Survey Participant
  - [So that] I can associate my user session with an authenticated third-party identity
  - [I want to] Be able to login to the survey site with my OAuth / OIDC third-party identity
- Feature 16: Survey Pagination
  - Points: 3
  - Assigned To: Brandon Nguyen Yi-Ting Lee
  - [As a] survey participant,
  - [So that] I can focus on a smaller set of questions,
  - [I want to] have the questions split across multiple pages.
- Feature 17: Save Survey Progress
  - Points: 2
  - Assigned To: Brandon Nguyen Chengyuan Qian Jacob Mathes
  - [As a] survey respondent,
  - [So that] I can complete the survey when convenient,
  - [I want to] be able to save my current survey progress and resume taking it later.
- Feature 19: Unify survey profiles and responses
  - Points: 2
  - Assigned To: Minseo Park Yi-Ting Lee
  - [As a] survey responder,
  - [So that] I can create a profile and take the survey,
  - [I want to] have a unified user experience allowing me to easily create a profile and fill out the survey.

### 3.4. Backlog

- Feature 18: Verification with Real Survey Data
  - Points: 1
  - Assigned To: Andres Santiago
  - [As a] developer,
  - [So that] we know that our application does what the client wants,
  - [I want to] use real-world data to both test and validate the program.
- We were not able to complete this because we were not able to obtain the data from the client.

### 3.5. Burndown



## 3.6. Changes

There have been significant changes in the model schema. Through communication with the client, we were able to resolve the ambiguities in the existing project requirements, and based on this, we were able to sufficiently write the models necessary for the remaining feature implementations.

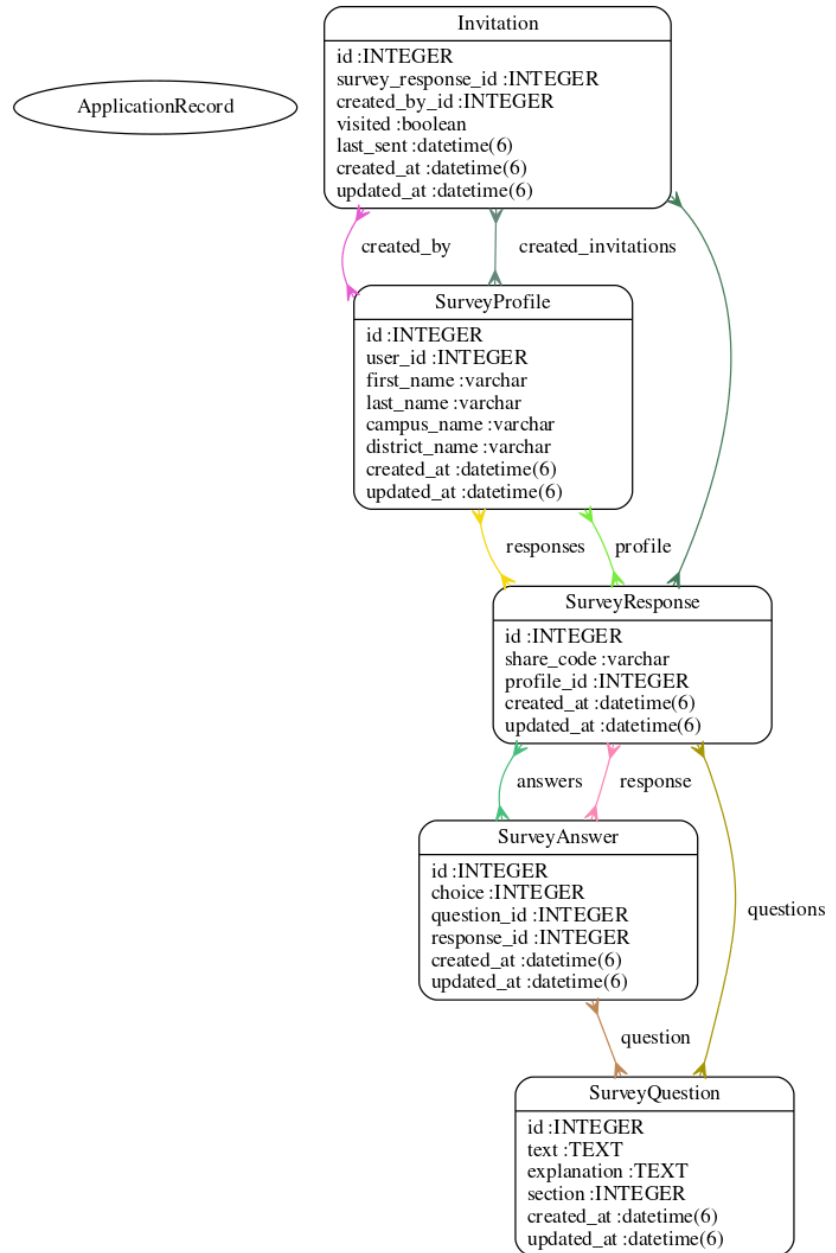
In this sprint, one model and one controller were added to implement the Feature 13: Invitation story. We also made efforts to move a significant portion of the existing business logic residing in the "controller" to the "model".

We have completed a significant portion of the RSpec and Cucumber tests, which previously existed as placeholders, into useful tests with actual meaning.

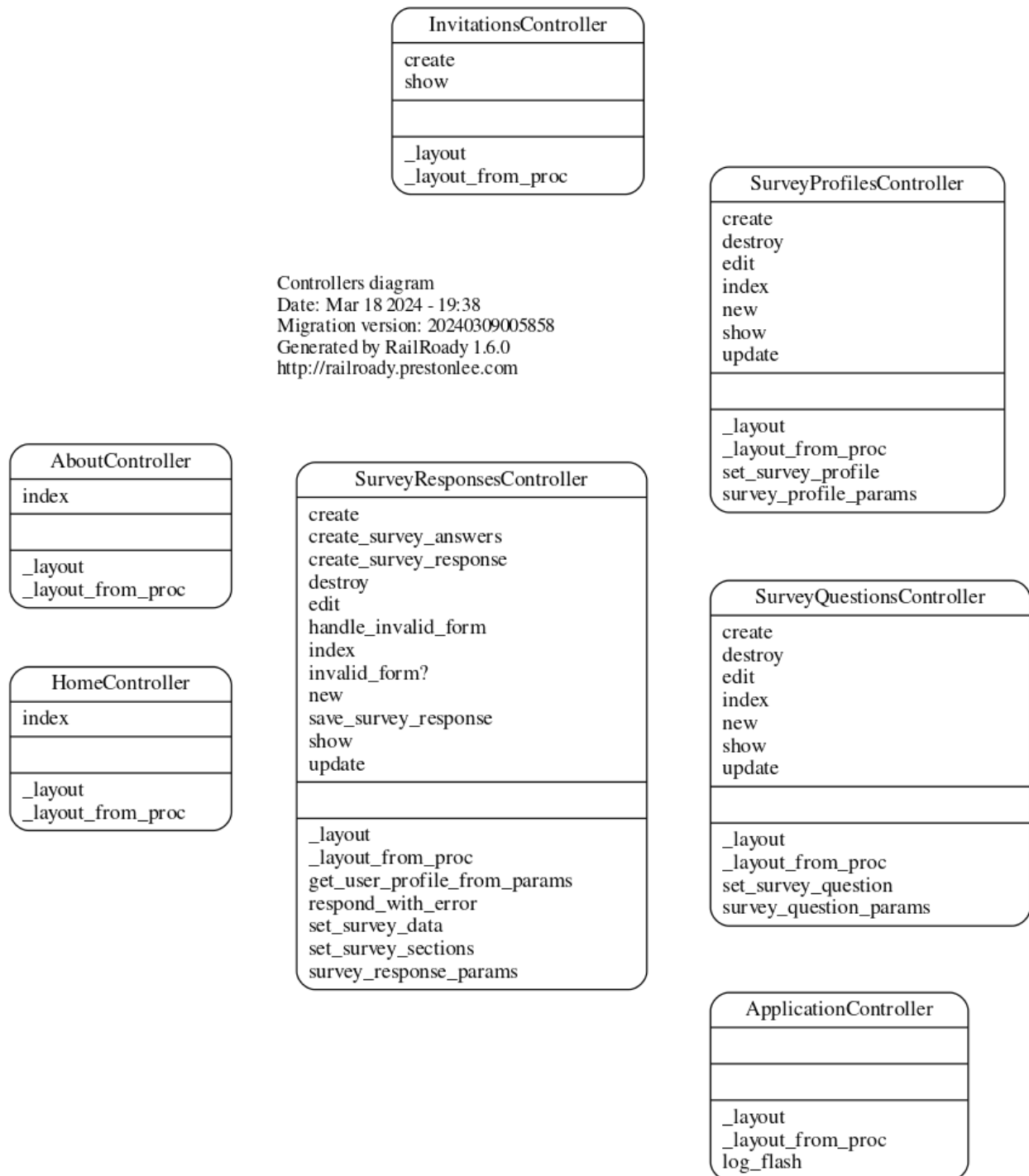
For more details, please refer to the full text of the pull request for the sprint achievements recorded in the pivotal tracker.

## 4. Design Diagrams

Models diagram  
Date: Mar 18 2024 - 19:38  
Migration version: 20240309005858  
Generated by RailRoady 1.6.0  
<http://railroady.prestonlee.com>



**Design Diagram 1: A Complete Model Relationship**



**Design Diagram 2:** Controller Definitions

## 5. Code Quality Evaluations & BDD/TDD Review

SimpleCov reports 96.07% percentage coverage from RSpec and Cucumber tests.

Code Climate reports 6 issues: 1 code smell is from a function over 25 lines, 2 code smells are related to excessive complexity, 4 are duplications due to rails auto-scaffolded controllers and views, and the other 4 are from unformatted code.

At the end of sprint 2, Code Climate reports that we have an 'A' maintainability rating with 173 files, and a technical debt of 3 hours.

```
andy@Meat:~/csce-606/elrc/rails_root$ bundle exec rspec
.....

Finished in 1.43 seconds (files took 1.98 seconds to load)
113 examples, 0 failures

JSON Coverage report generated for features, specs to /home/andy/csce-606/elrc/rails_root/coverage. 367 / 382 LOC (96.07%) covered.
Coverage report generated for features, specs to /home/andy/csce-606/elrc/rails_root/coverage. 367 / 382 LOC (96.07%) covered.

andy@Meat:~/csce-606/elrc/rails_root$ bundle exec cucumber -f summary
Present Analysis Results
  Invalid survey inputs ✓

Establish Project Data Models
  Invalid model attributes ✓
  Valid model attributes ✓

Data Submission
  Analysis displays correct values ✓
  Analysis displays tetrahedron ✓
  See Next button ✓
  See Save button ✓

Development Environment Setup
  Verify database connection ✓

Initial UI Design
  Verify survey profile page ✓
  Verify survey form page ✓
  Verify survey questions ✓
  Verify explanation on survey_responses page /survey_responses/1 ✓

Invitation
  User finishes survey and creates an invitation ✓
  Invited user visits the link ✓

Survey Profile Creation upon successful OAuth login
  User logs in and creates survey profile ✓
  User that has already created survey profile logs in ✓

Reworked Project Data Models
  Invalid model attributes ✓
  Valid model attributes ✓

Query Survey information
  ✓
  ✓

Theory Exploration
  Verify about page rendering ✓
  Verify tetrahedron rendering ✓

22 scenarios (22 passed)
99 steps (99 passed)
0m0.657s
JSON Coverage report generated for features, specs to /home/andy/csce-606/elrc/rails_root/coverage. 367 / 382 LOC (96.07%) covered.
Coverage report generated for features, specs to /home/andy/csce-606/elrc/rails_root/coverage. 367 / 382 LOC (96.07%) covered.
```

## Breakdown

173 FILES

MAINTAINABILITY

TEST COVERAGE

## Codebase summary

MAINTAINABILITY

A

3 hrs

TEST COVERAGE

A

96%

## Repository stats

CODE SMELLS

3

DUPLICATION

4

OTHER ISSUES

4



## 6. Customer Meetings Summary

### Meeting 1: Harrington Tower, 2024-03-19 16:00 CST

#### Summary

- Discussed realistic expectations and directions for the project deliverable at the end of the semester.
- Client discussed steps remaining for data processing before it can be given to the development team to implement in the data analysis feature.
- Client also mentioned providing the development team with real-world responses to the OLEI in order to validate the application.
- The client mentioned potential features regarding user retention during the survey response phase, and user feedback on their opinion of the quality of results.
- The client is aware that they need to provide a detailed explanation/specification of analysis of the OLEI in order for the development team to continue making meaningful progress towards a completed product.

#### Feedback

The clients were satisfied with the progress made in sprint 2, and were understanding of the end-of-semester timings in order to get the project completed on time.

## 7. Links

GitHub <https://github.com/tamu-edu-students/csce606-ELRC-Synergistic-Leadership-Theory>

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Pivotal Tracker <https://www.pivotaltracker.com/n/projects/2690137>

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Slack <https://app.slack.com/client/T06GRHECJEM/C06GY2R74KX>

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Live Deployment <https://elrc-app-dfcfc7cd862b.herokuapp.com/>