Note: The final document will need to be formatted as specified here: http://aaronbloomfield.github.io/slp/slides/spring/02-deliverables.html#/stsreport

Specific formatting: http://www.acm.org/sigs/publications/proceedings-templates (Tighter alternate style)

- Abstract
- Introduction
  - Innisfree is a residential community for adults with disabilities
  - Has ~40 residents that they take care of, as well as ~40 volunteers / staff
  - Current solution: Use a pen and paper system of scheduling
    - Too slow
    - Hard to keep records
    - Secretarial load
    - Hard to generate statistics and reports
  - SLP course structure
    - Group work, meeting structure
    - 2 week iterations, TDD (specific type of development methodology we are employing – in early slides)
- Background
  - Primarily used as a scheduling system to manage resident appointments
    - Provides easily accessible information and reminders to volunteers / staff
    - Manages checking out cars to drive residents to these appointments
  - Ruby on Rails
  - Testing done via Factories
- Related work
  - Google / Apple / other mainstream scheduling online scheduling options
    - Too generic, doesn't allow for management of residents, doctors, and other involved parties
    - No user privilege levels
    - Optimized to be managed by one user; can't have multiple users with their own individually generated calendars
    - Hard to filter calendars
  - Outlook
    - Too complex for requirements
    - Volunteers don't want to spend time navigating a complex desktop-based system, they need a quick method to schedule and check appointments while on the go
    - No way of supporting car-reservation systems
    - No authentication-based privileges
- System Design
  - MVC model
  - Login system
    - Three levels of authentication
      - Admin / Staff

      - Volunteers
      - Workstation heads
    - Every account has an entry in Users
  - Appointments schedule (core functionality)
    - Upcoming appointments
    - Monthly calendar
  - Houses
    - Residents and volunteers are assigned to a specific house
    - Volunteers can perform CRUD operations on appointments and residents within their house
    - Houses created by admin (staff)
  - Doctors
    - List of doctors with basic information (name, type, contact)
    - Appointments specify a doctor that the resident is visiting
  - Cars
    - Calendar to show when certain cars are available
    - Can add cars available for use by volunteers / staff
    - Volunteers and staff can make reservations to use the car for an appointment
  - Reports
    - Dynamic report generation
    - Shows all the appointments with the given specifications
      - Can filter by houses, resident, doctor, type, and date
  - Add any particularly interesting design decisions (will need to discuss in meeting)
- Procedure
  - Staff and volunteers will use the website on a daily basis to:
    - Make appointments
    - View their current appointments
    - Make changes to residents, houses, etc.
    - Reserve cars
  - Data on residents, houses, etc. is updated as it changes
  - Volunteers sign up for email alerts to remind them of their residents' appointments
  - Staff can generate reports of appointments for data backup / hard copies
- Results
  - The customer can much more efficiently manage their resident's appointment schedules
  - The volunteers and staff can now access the management system from anywhere using their phone / computer
  - Requires actual numbers from user testing
- Conclusions
  - Designed an appointment scheduling system to allow Innisfree to manage their residents' appointments via a web interface, which allows them to save time going through the process of scheduling appointments via the previous pen and paper method
  - Summarize major points from technical report
  - Summarize requirements, and the extent to which we satisfied them

- Future work
    - Creating a dedicated mobile app
    - Making the calendar more descriptive of appointments
    - Add and talk about more ideas for more features and improvements that could be added to the system in the future
- Acknowledgements
    - Ruby / Rails gems
    - Customer
- References
    - Innisfree website
    - Ruby on Rails website
    - Sites for gems we used
    - Tutorials we used
- Author list
    - Format for each entry:
      “Xavier Palathingal
      University of Virginia
      xvp2he@virginia.edu”