Section 1: Identification

The Identification section must contain this information:

- Project name: Tangelo
- Project leader name and email address: Ziv Batscha
- Team member names and email addresses:
 - Fawaz Ahmad
 - Ryan Thorpe
 - Austin Mejia
- The URL of your BitBucket or GitHub source code repository.
 - https://github.com/zbatscha/tangelo

Section 2: Elevator Speech

Everyone, including Princeton students, lead busy lives. Getting the day started is the vital first step everyone needs to take. Still, with so many things to be updated on–campus events, weather, recent news, birthdays, etc.—it can devolve to a dizzying series of jumps between a dozen apps. This is especially true for Princetonians: with such a unique campus culture, most "daily" apps can feel like they're shoehorned into our lives and only encompass a fraction of our priorities.

Enter ~Tangelo~, the daily app designed for Princeton students. Inspired by the simplicity of bullet journals, our modular interface allows users to custom-build their perfect morning experience. Our widgets offer the ideal balance of utility and delight, with sleek interfaces and robust functionality for the everyday experience. Have a live calendar of important academic updates or browse the Daily Prince headlines from a single dashboard interface. With widgets ranging from the uber-practical time/date clock to a talking birthday present that updates you on your friends' birthdays, we have something for every kind of person.

Make life simple. Get Tangelo.

Section 3: Overview

The system will consist of a dashboard interface that will give the user options in terms of which "widgets" they want to add. These widgets will span different domains that could all be relevant to a Princeton student. For example, a user might choose to have the weather, news, res college menu, and important academic calendar widgets on display for their dashboard, so that they can quickly check on information and dates that are relevant to them. This app will unite Princeton specific information, like the academic calendar and menu widgets, with information that Princetonians need on a daily basis, like the weather and news.

Section 4: Requirements

Life at Princeton is swamped with information, and students often find that managing that information is quite difficult, and sometimes more time consuming than it need be. Tangelo solves this problem by functionally morphing all the relevant details, based on the user's desire, onto one interface. As such, the intended user is the Princeton student, and the more the student is involved on campus, the more the student can get out of Tangelo. It makes life simple. Different from a calendar, which is the user just organizing time, Tangelo places all communication relevant to a user between the Campus, student groups, and orgs that matter all in one place. It is information focused, rather than interaction focused. And as such, Tangelo will make life easy.

Section 5: Functionality

The system will give Princeton students/community members the capability to have all their relevant Princeton info on one interface, which can save them plentiful time and give massive convenience. This is especially useful in the mornings, where students are often running late and don't have the time to check through everything that matters so having all material pertinent to them in one place will greatly reduce this stress. Even outside of morning hours, our system design will make it an easy tool for organizing the lives of its users, and by its customizable nature, will very much be adjustable to each user's desires.

And with the campus atmosphere, by allowing organization/club leaders to also present widgets for their own club's information, the potential for Tangelo's informational benefit will only rise. All of what a student needs to organize their life at Princeton, all effectively meshed into one app.

Section 6: Design

Tangelo is a customizable, dynamic dashboard unique to each user. It consists of a select number of movable widgets that can be locked into place on an initially blank canvas. Each user can choose any number of these widgets, each offering a distinct feature and personality. Information displayed by each widget will be sourced from a variety of both local campus platforms and online sources. Examples of campus specific data sources may include residential college dining menus, eating club open hours, residential college and campus wide calendars, performances, etc. Data sourced from non-campus sites may include weather, news, etc. Each added widget/data source will require specific attention/functionality to be added on the processing tier. The application tier should be highly modular, such that new widget add-ons only require specific attention on the processing tier should they come from a distinct data source. For example, student group widgets all have the same general functionality, with the only difference being the feed source (club managing leaders, usg). Adding a new widget should be a matter of an user submitting a widget tagline and description. This user now has ownership and responsibility over that widget's feed, and can add additional users to manage the widget. Widget management on the user end will be done through the dashboard.

Client-side application frameworks:

HTML, CSS (Bootstrap), Python, Javascript

Data management:

PostgreSQL

Application processing:

Python + Flask

Application Deployment:

Heroku

Section 7: Milestones

Timeline

General Outline

MVP:

- Dashboard with a modular snap-grid (maybe 12x8 "units")
- A widget "wrapper" that sandboxes code with core movement/snapping behavior
- A 2x2 unit clock widget`
- These widgets can be added or removed from the dashboard
- Login/profile for unique widgets per account

Round 1:

- One weather widget
- One dining menu search widget
- Widget search bar

Round 2:

- Birthday widget that tracks user's birthday + user's friends
- Academic calendar widget
- Adding designed skins for widgets and dashboard
- Create a client-side submission for generic widgets

Round 3:

- Finish generic widget
- Meme widget
- Academic Calendar widget
- News widget
- Princeton News widget

Widgets that we Designed:

Academic Calendar

COVID-19

News

Poem-a-Day

Princeton University News

Welcome to Tangelo (Demo)

Clock

Date

Happy Birthday

Weather