Sprint 1 Plan

Date: Sep 27, 2024
Status: Completed ▾
Team Roles:
- Customer: Tito Chowdhury
- Product Owner: Mahima Ganni
- Scrum Master: Govind Joshi
- Developers: Ankitha Prasad   Sai Siva Rohith Tirumalasetti

Customer Meeting Details: Every Friday @ 3PM CST on Zoom
Important Links
- Application Page: https://planxt.herokuapp.com/
- Github: https://github.com/govindjoshi12/Fall2024-PlaNXT/
- Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2721605
- Slack: plantxcorp.slack.com

Project Description

PlaNXT is a web application for chronological floorplanning for events with 2D and 3D rendering. It aims to streamline the process of setup and teardown of events. The application is a part of the EVENTS 360 event planning app group, which aims to automate three major aspects of any event planning: talent management, guest management, and event floor planning. There are several applications which can be used to render floor plans; the key component which differentiates PlaNXT is the existence of chronological event planning. This application allows specifying set up and break down times of different components of the event including furniture, cameramen, and so on, and allows for visualizing the state of the venue at different times between the start and end of the event. **The primary stakeholders** of this project are the customer Tito Chowdhary, the end-users, the development team, the CSCE 606 professor Dr. Ritchey and the TA, Anirith Pampati. We met with the customer, Tito Chowdhary, to better understand the requirements of the project. The next section contains a summary of the meeting and the main customer needs.

Meeting Summary

During the meeting, we introduced ourselves to Tito and expressed our interest in the project and in developing the 3D rendering component. We spoke about our understanding of the requirements, the work completed by the previous team, and what his expectations and requirements for this semester are. We then discussed Tito's requirements for this semester which are discussed in the next section. We ended the meeting by establishing a regular meeting time for our team.

Customer Needs

Tito's main requirements for this semester are to finalize the application and put it into production. In Spring 2024, the previous team accomplished several components of the project such as login across all of the EVENTS 360 apps, a 2D chronology bar, and 3D rendering. The major requirements to complete this project this semester are to incorporate a chronology bar into the 3D preview in order to view the 3D preview of the venue at any given time between the start and end of the event. The customer is not tied to the existing 3D preview backend, and is open to changing the existing solution if it would be easier or necessary to complete the requirement. Additionally, it is crucial for the user to be able to specify dependencies between different items. If the setup of one item is delayed, changing its time should immediately update the timings for items dependent on the delayed item. The updated timings should respect any breaks during the event. These are the primary requirements for the customer in order to get the application to be production ready.

User Stories

User Story 1
Feature: Chronology Bar in 3D Preview
  ● As an event manager who is a user of PlaNXT,
  ● So that I can view the 3D preview of the venue at any given time,
  ● I want to be able to scrub a chronology bar in the 3D preview of the floor plan (similar to the existing chronology bar in the 2D top view) and see the various items added in the 2D view at the appropriate times.

User Story 2
Feature: Item status indicator depending on time
  ● As an event manager who is a user of PlaNXT,
  ● So that I know the status of an item at a given time (whether it is currently being set up, already ready, or being broken down),
  ● I want to see a status indicator of the item depending on the current time selected using the chronology bar in both the 2D and 3D Previews

User Story 3
Feature: Make date input less cumbersome when adding items to the 2D Canvas
  ● As an event manager who is a user of PlaNXT,
  ● So that I can add items to the 2D top view with ease,
  ● I want the "day" field of the setup and breakdown times to be automatically populated with the date of the event without needing to manually input this information

User Story 4
Feature: Understanding the legacy code
  ● As a developer
  ● So that I can effectively work on enhancing the application

- I want to explore and understand the legacy codebase for PLANXT

User Story 5
Feature: Setup of application on local and Heroku
- As a developer
- So that I can develop, test and deploy changes to the application
- I want to set up the PLANXT application with tools and dependencies on my local machine and Heroku

User Story 6
Feature: Fix broken forgot password process
- As a user who forgot their password
- So that I can regain access to my account
- I want the reset password link sent to my email to function correctly

User Story 7
Feature: Create Dependency between items
- As a PlaNXT User,
- So that I can link related items in my schedule,
- I want to be able to create a dependency between two items, such as a table and a chair, where one item's time change will automatically update the other based on a time offset.

User Story 8
Feature: Modify a dependent item automatically
- As a PlaNXT User,
- So that I can save time and maintain consistency in the schedule,
- I want any dependent item (e.g., chair) to be automatically adjusted when the main item (e.g., table) is rescheduled, while maintaining the original time difference.

User Story 11
Feature: Modify a dependent item according to break time
- As a PlaNXT User,
- So that workers can take breaks during the designated break period,
- I want any dependent item (e.g., chair) to be automatically adjusted after the break period, if it falls within the break period, when the main item (e.g., table) is rescheduled.
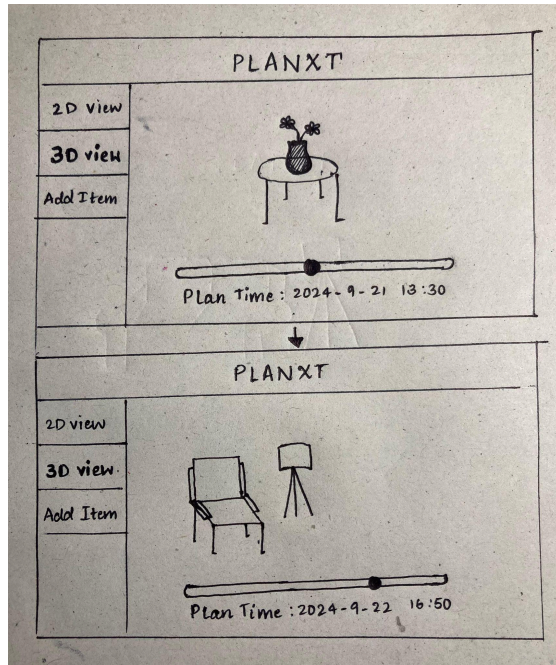
User Story 12
Feature: Understand the design decisions of the previous team
- As a developer of PlaNXT,
- So that I can have a better understanding of the previous developers' design decisions
- I want to get in touch with the previous developers to understand their design decisions and philosophy driving their development
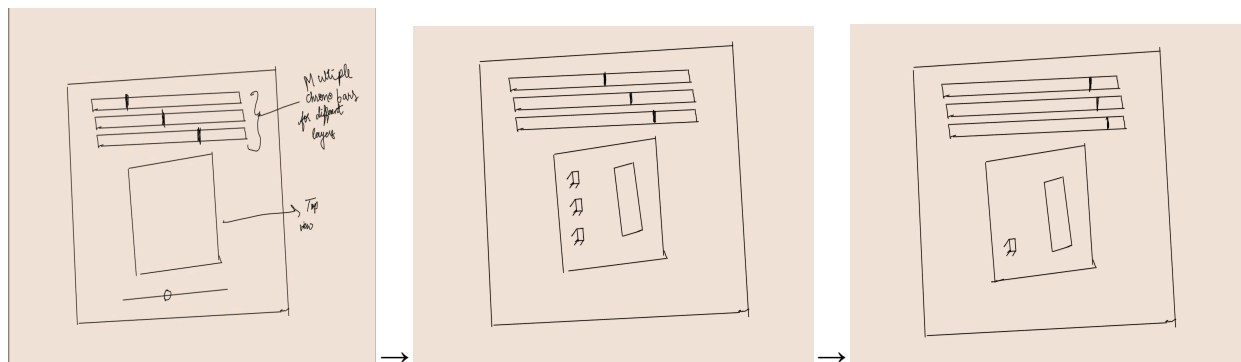
UI Mockups

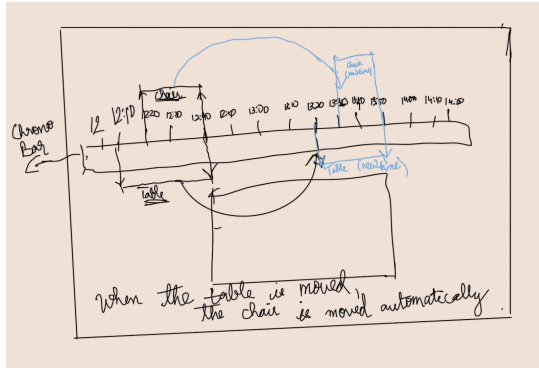**User Story 1**
Feature: Chronology Bar in 3D Preview

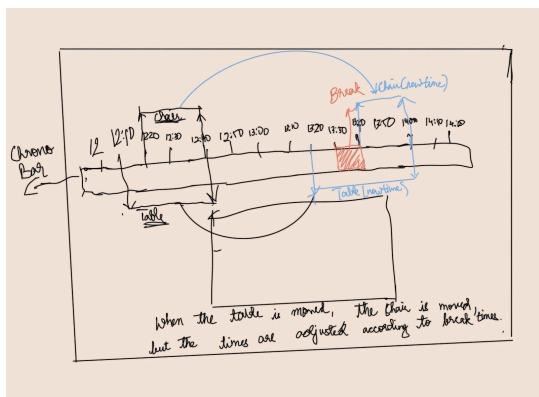**User Story 2**
Feature: Item status indicator depending on time

User Story 9
Feature: Modify a dependant item automatically

When the table is moved, the chair is moved automatically.

User Story 10
Feature: Modify a dependant item according to break time

When the table is moved, the chair is moved but the times are adjusted according to break time.

Sprint Backlog

We would like to work on the following user stories in sprint-1:
- User Story 4: (5 points)
  We would like to understand the legacy code first because developing any new features requires a good understanding of what has already been completed.
- User Story 5: (5 points)
  After getting to know about the legacy code, each one of us will set-up the application both locally and on Heroku.

We have assigned a 5 point value to both the user stories because of their importance in understanding the fundamentals of the project. Both the user stories are to be completed by all the team members.

By the end of sprint-1, all the team members should have finished setting up the environment and this would allow us to work on the subsequent user stories and develop new features in the application.

Legacy Project Summary

This project has been worked on for the past few semesters and we are inheriting code that has been written by several teams across the past few years. As part of user story 5, it will be crucial for us to understand the decisions and overall philosophy driving the existing code. Most importantly, we need to understand the 2D and 3D rendering tools used by the previous teams, and how the two systems have been interconnected so far. We will need to make a decision about whether to continue to use the existing rendering system or use different tools.

As a preliminary step, we tested the existing web application and compared it to the specifications from the PlaNXT slides.

Login
We found that the "forgot password" mechanism is not fully implemented; the link sent to the user's email address leads to a 404 page. We have added a user story to finish this implementation. It will be necessary for us to understand the login system in order to be able to fix this issue.

2D View
When creating a new plan, adding items, or performing any action that involves inputting a date and time, the input process is very cumbersome. We have added user stories to simplify the item adding process by prefilling the date field with the date of the event. It will also be useful for the team to brainstorm intuitive UI designs for making the user experience as seamless as possible. Additionally, one of the goals of the project is to add a rich icon library to the 2D top view. It will be important for us to understand how the existing icon library and drag-and-drop system works so we can expand it.

3D View
The current system opens the 3D preview in a new tab. There are certain functionalities in the 3D view that don't correspond to the top view and it is not clear what the connection between the two are. For example, there is the option to add walls and items to the 3D preview. In fact, there is a much larger icon library in the 3D preview than in the 2D Top view. However, making any changes here are not reflected in the 2D top view, and if you reload the page, all your changes disappear. It will be useful for the team to make design decisions about the 3D view and clearly communicate the functionality and limitations of the 3D view. One option suggested by the previous team is to show the 2D and 3D previews side by side, and have the 3D preview update live.

Lastly, as captured by user story 12, it will be useful for the entire team to communicate with the previous developers to get a better understanding of their coding philosophy. Having a meeting will be useful, and it will also be useful to view the tasks and user stories introduced and completed by previous teams.