PlanNXT

Members:

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1. **<u>Summary:</u>**

   The PlanNXT helps the event planner visualize their events. The event planner uses canvas and time table editing as the main focus to set up and schedule the event, and finally integrates them in one timeline. The staff involved in the event setup can confirm the virtual appearance of the event site by dragging the timeline to recreate the actual event site. In addition to setting up the event venue, the project planner can also assign tasks to the staff involved in setting up the venue. A complete project layout reduces the possibility of tasks being missed and helps the event planner to clearly communicate instructions to subordinates.

   The event planner uses time sheets to categorize events in terms of placement of items and events to be executed, and place staff in positions during events to run an event in an organized manner. The planner of a project will have the highest authority to execute his project(who can view/edit this plan, plan name, break time.eg), he can add and delete projects, or make changes to the plan, as well as assign some authority to the next level of staff. The user(event planner) can create a floor plan with some metadata. the user can see all the floor plans in his/her page.The user can edit the floor plan in the draw panel.
   In the draw panel, users can see different layers, control the canvas scale, control the size of each item, see all the items' set-up time and end time and see the floor snapshot at any time point. The user can set the dependency of events, like event 1 depends on the end time of event 2, automatically skip plan break time. Also, the user can rotate each item in the canvas.

2. **<u>User Stories:</u>**

   As an event planner, I can plan different parts of an event in different views. I want to have four editable layers on the displayed floor plan - each layer is used for one type of planning need. Furniture, visual displays, appliances (audio/visual and scenery), and staff placement.

   As an event planner, I can visualize my plans in the diagram. I would like to have several element symbols (e.g. sofa, chair, sound, etc.) displayed on the sidebar of that layer, and I can drag and drop each element into the floor plan of the corresponding layer.

   As an event planner, I need to have a general idea of the venue where the event will be held before I can place the relevant elements in the plan. I want to have a

floor plan consisting of five sections: check-in, reception, performance, backstage, and perimeter composition. I can map these five areas.

As an event planner, I can set the time period for the event and plan within that time period. I have the right to set the start and end time of an event in a time table. Meanwhile, when I adjust the timeline, I need to know at which moment and at which specific location in the venue to add a certain element.

As an event planner, I can systematically manage the projects that I create. I would like to have an action item table to record each created item. Each entry includes the name of the project, the time it was executed, and a checkbox (which approved members can check to execute that action item). Items that are checked on the table will change color on the floor plan so that I can see that it has been completed.

As a database developer, I need to know how the communication data format is designed, how the data in this product works, such as what that data is associated with on the front end.

As a user in the management of a company, I would like to have a page with people management and task assignment functions that would allow me to better manage people and assign tasks to projects.

3. **Legacy Project:**

   PlanNXT is not a Legacy Project.

4. **Team Role:**

   Xi Chu: Database design and development, back-end, github
   Wei Wei: Pivotal Tracker management, user interfaces, canvas design, time table
   Youli Zhao: Slack & Pivotal Tracker management, user interfaces,
   Ziyan Xiong: time table, user stories, back-end
   Yuqing Zhang: Team leader, project architecture, code environment, github

5. **Each Iteration:**

   Iteration 0: built slack channel; built pivotal tracker; completed the login page and core user page design; basic system design is completed; user flow design is completed;

Iteration 1: finish the initial drag and drop canvas; finish the backend json API; finish the environment setup; test the environment database; finished the model managing page(index page);

Iteration 2: front-end technology investigation; data format design; back-end environment preparation; update the drag and drop canvas; edit page development; update the index page; database table design; database table metadate setup; CRUD API development; time bar added; three layers added

Iteration 3: uptate the three layers to four layers; edit page adjustment; admin page development; cucumber test report; frontend and backend integration; unit test cases development; test and resolve API exceptions;

Iteration 4: test more unit cases and integration cases; edit page authorization check; login page; login API development; edit page backend integration; create new floor plan API; welcome page added; adjustment of plan model management page; uptate the user edit page; password reset functionality; rotate icon direction; resize icons;

6. <u>Customer Meetings:</u>

03/02/2022 Wednesday (15:00-16:20)
- The client shows us how to update the process on his spreadsheet.
- The client explains some of the most important requirements for web page rendering inside his slides. The content of the master table should contain all the items in all the layers, scaling the size of symbols, the surroundings should be shown on the first page regardless of the planning.

03/09/2022 Wednesday (15:05 - 15:33)
- We showed the demo of the interface(Drag and draw function) for the client.
- We then discussed our plan for this week: Integrating frontend and backend to deploy current demo to a server, settling down the data transmitting format.
- The client also asked us to prepare for an icon library.

03/23/2022 Wednesday (15:06 - 15:43)
- We showed our preparation on the backend which includes the setup database, implementing basic functions for displaying pages.
- We then discussed our plan for this week: Finishing integrating frontend and backend and deploying the current demo to a server.

03/30/2022 Wednesday (15:03 - 15:35)
- The client required us to put ETA of each task on the tracking spreadsheet.

- We described what we have accomplished this week for the client: completed the data transformation scheme, deployed the demo to the server.
- Then we talked about our plan for this week: completing the demo for the time bar.

04/13/2022 Wednesday (15:08 - 15:52)
- We showed the timebar feature to the client.
- Then we discussed the task for next week: set up layers for different objects.
- We also talked about the future work if we got extra time which includes adding plan pages for different users and login pages.
- The client also requests that the time in the item table should update automatically according to the dependencies set by users.

04/20/2022 Wednesday (15:07 - 16:26)
- We showed the client the feature of separating objects in different genres into separate layers and calculating relative time in the item table.
- The client then wants us to implement the feature to edit, resize or delete items.

04/27/2022 Wed (15:05 - 15:42)
- We showed the client the resizing and editing features for each item.
- The client wanted us to calculate break time automatically when a relative time is set.

7. **BDD/TDD Process:**

The BDD process of our software development is mostly realized in the weekly meeting with our client. Each week, we will show him the user stories we accomplished last week and make sure the features implemented are what our client wants. If not, we will modify the user stories and implement it in the next week. Apart from that, we will also discuss the most urgent feature the client needs and compose its user story together. These user stories are prioritized in our implementation next week.

For the UI part, the client and us will draw and discuss the sketch of the web page outlook via PPT. An examples for the plan page UI demonstration is shown below:
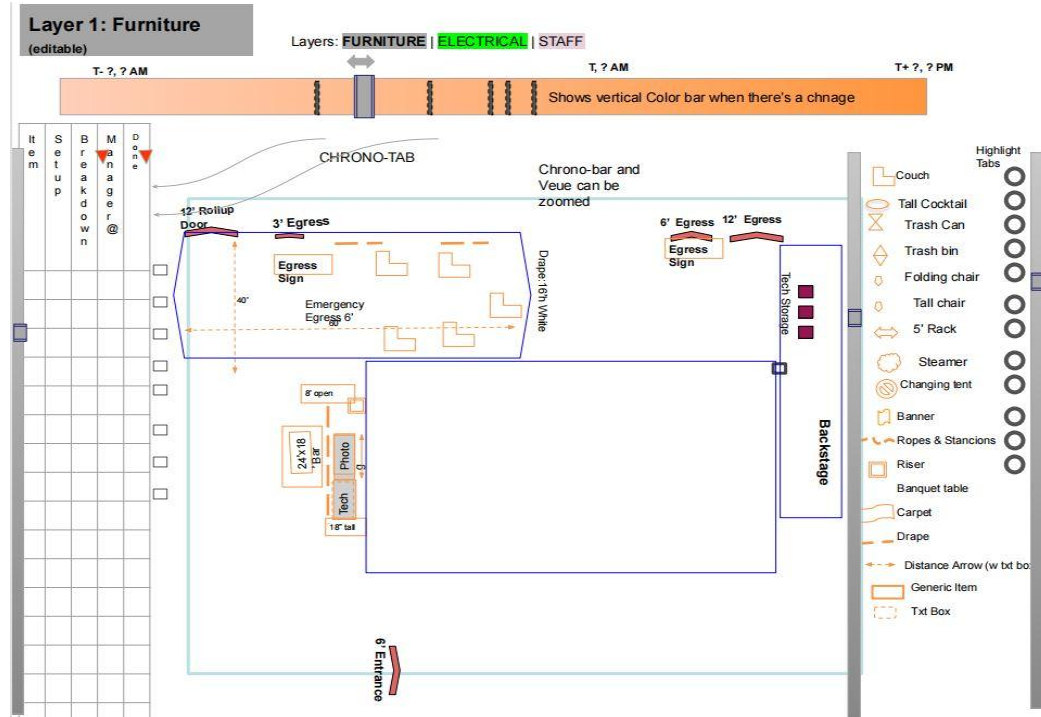
In our opinion, BDD has various benefits for our development process. The most significant one is that it helps us communicate with the client better. The client can see the process of the software development and point out the direction timely if he thinks we are not on the right track which saves the time and effort for both sides.

For the TDD part, we write some cucumber tests for our user stories implemented, which focus on the server side. Since the user stories in our projects are mostly on the forented side and implemented with javascript. It is kind of inconvenient for us to test these features with cucumber and Rspec.

8. <u>Management approach:</u>

Every week we will have an iteration meeting with all group members to talk about things to do in this week and new requirements from our customers. Then we will give enough time for every member to finish. Sometimes, there is a busy week like midterm or spring break. In this case, we will put off the deadline of every task.

9. Issues in Heroku:

- Heroku DB connections issues (how to connect to db console)
- Heroku Debug issues(how to see latest logs from heroku)
- Heroku environment identification (how to identify environment)

10. Issues in AWS Cloud9 & GitHub:

- How to handle conflicts when git pull –rebase
- how to send post request to cloud9 port (copy curl command from postman)
- how to add remote server to github and sync commits
- the format to send post request (form based or json based)

11. Other tools:

- Canvas api in frontend
- Jquery in frontend
- Bootstrap in frontend
- Pg(postgresql) in backend

12. Check all code is pushed:

All code is pushed to the link below.

13. Discuss the repo contents:

Pls refer to the guide of project: 📄 PlanNXT Server Guide

14. All links:

14.1 Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2556101
14.2 Public GitHub repo:https://github.com/LeviZhang1993/plannxt
14.3 Heroku: https://pacific-ridge-51317.herokuapp.com/

15. Videos:

15.1 PPT video: ppt-demo-plannxt.mov
15.2 Demo video: page-demo-plannxt.mov