Dinnerbell

Kevin Barnett,
Stephen Cosco,
Lindsey Ferretti,
Steve Sarnecki

System Concept

Dinnerbell makes planning and **organizing meals** with your friends much easier.

The app allows you to **invite friends** and **create groups** to easily invite all your friends to a meal at the time and place of your choosing.

Choose between **three unique meal types** to invite your friends to a home cooked meal, a sit-down restaurant, or order food for everyone.

Requirements

General Requirements

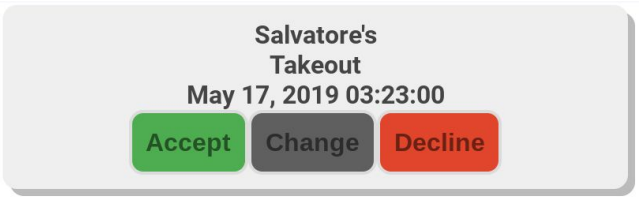
- Two types of users
  - Meal Master
  - Food Consumers
- 5 Core Tasks
  - Create groups
  - Schedule meal
  - Edit profile
  - Accept meal
  - Invite friends

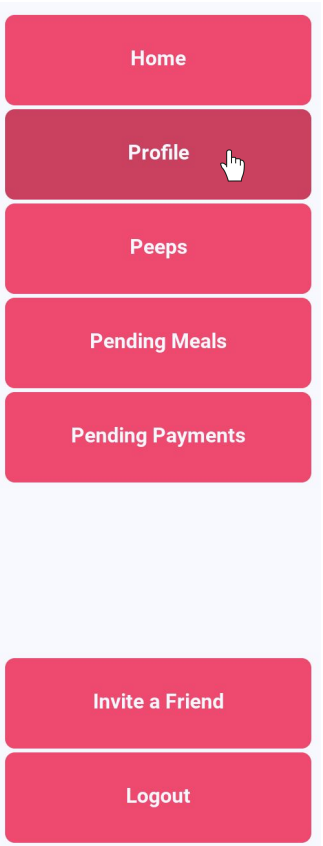
General Requirements

- Metaphors
  - Dinnerbell is a metaphor for the gathering of individuals to a meal, depicted by an individual ringing a bell and yelling something to the degree of “Soup’s on!”
  - Dinnerbell stands as a metaphor for a planner, or calendar. It’s use as a form of time management while doubling as a reminder and time keeper

General Requirements

- Color
  - #EF476F
- Column-format
- Consistent feedback
- Standard Conventions





Design Requirements

- **People Management**
  - Easy to organize your friends into groups
- **Time**
  - Easy to pick a time and be reminded about that time
- **Place**
  - Easy to pick a place for everyone to meet
- **Bill Splitting**
  - Easy to know how much money you owe someone for a meal
- **Meal Type**
  - Easy to pick between eating at home vs eating out vs ordering food

Usability Requirements

M Users shall be *reminded* when there is an upcoming meal.

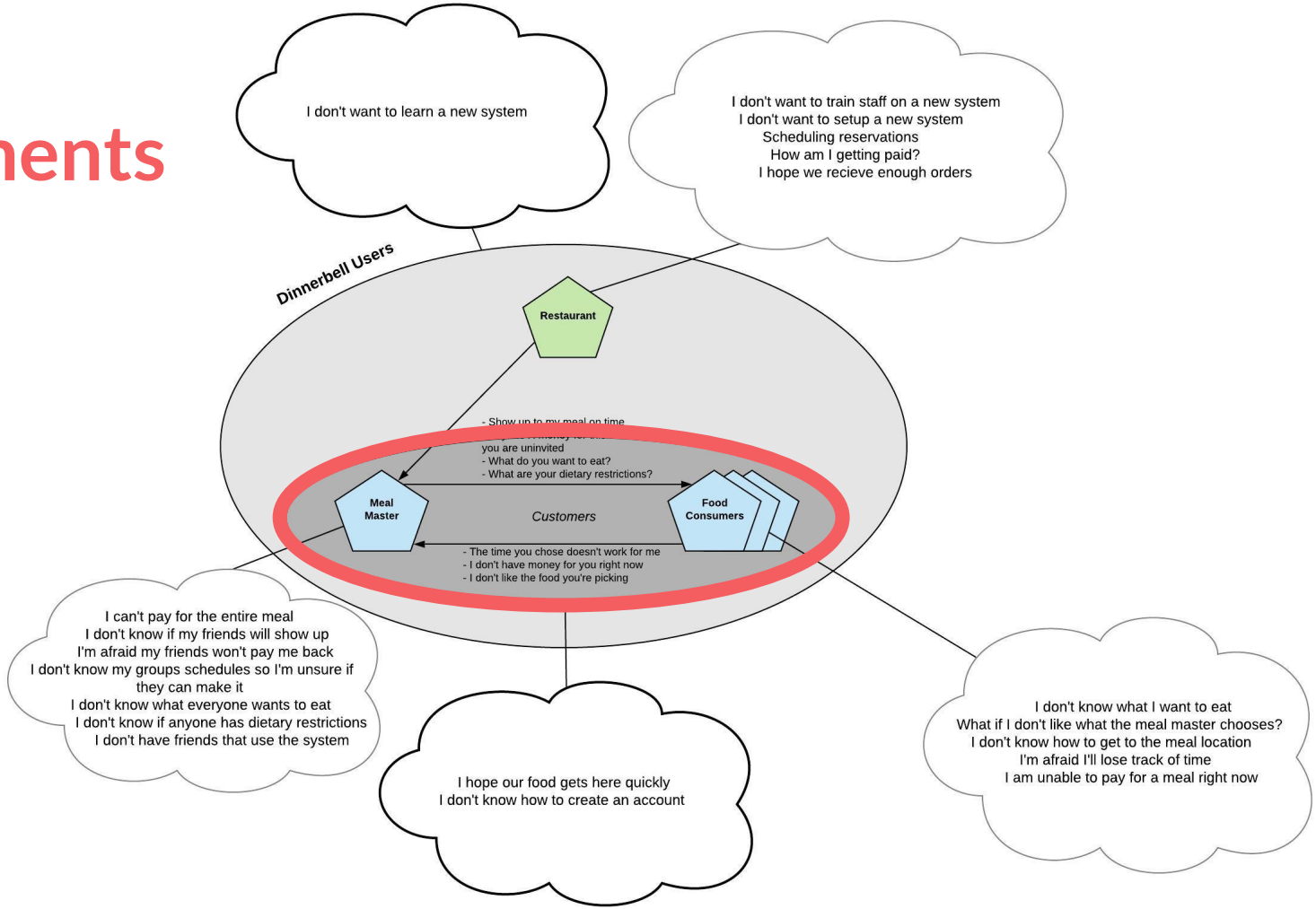
U The first time a user is a Meal Master, they will be *guided* through each step of creating a meal group.

L Users will be able to schedule a meal *without any errors* on their second attempt to create a group meal.

E Users will be able to schedule a meal in *under two minutes* on their second attempt to create a group meal.

S Dinnerbell will have at least *4 out of 5 stars* on any user review platform.

Usability Requirements



Design Evolution

Initial Concept

- Make planning a meal with friends easier
- One person decides on a meal time and location
- Target demographic → college students

Learned from Interviews

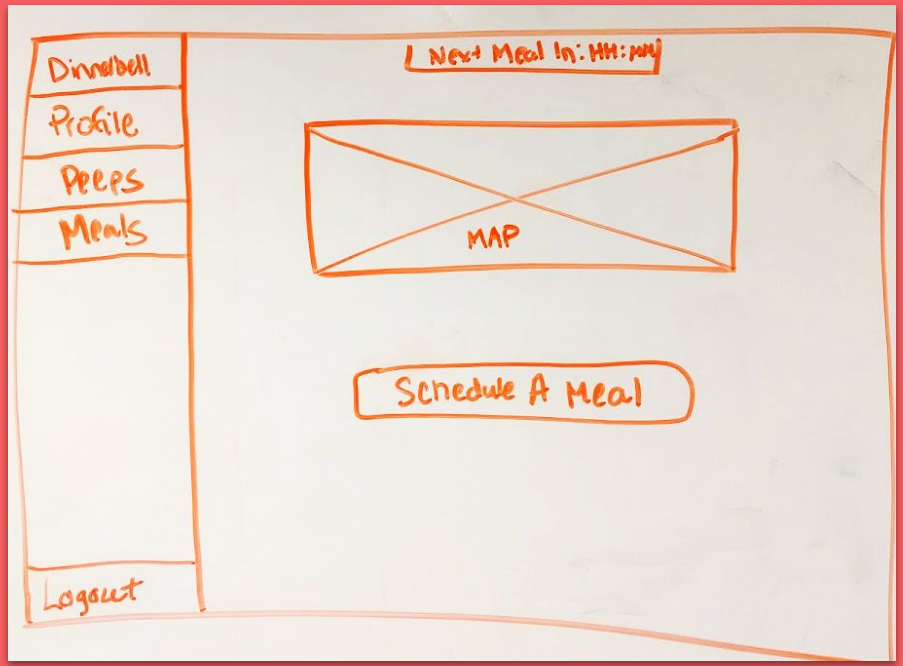
- Suggested a lot of nice QoL changes we hadn't thought about
  - Chat for meals
  - Allergens/Dietary restrictions
  - Allow group members to suggest a new time if the time doesn't work for them

- A lot of feedback told us we were going in a good direction with this app
  - Convenient to give a meal notification
  - Not have to look through an old group chat

Design Evolution

Low-fidelity Wireframe

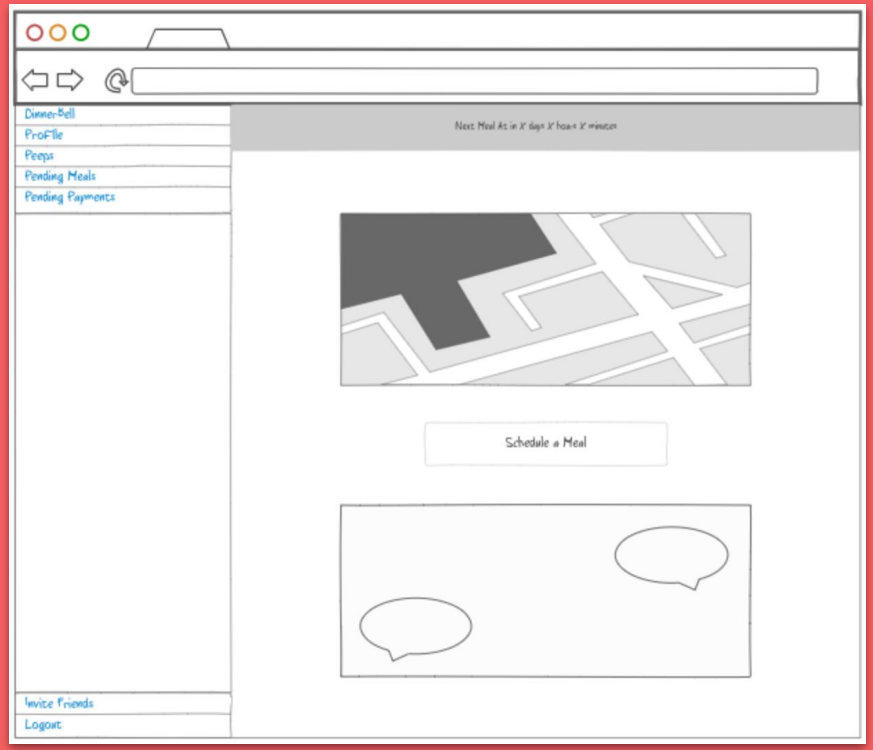
- Lays out base design
  - Navigation
  - Minimal menu
- Ad-Hoc construction
  - Minimalism
  - Markers
- Missing future elements
  - Pending payments
  - Chat
  - Invite



Design Evolution

Mid-fidelity Mock

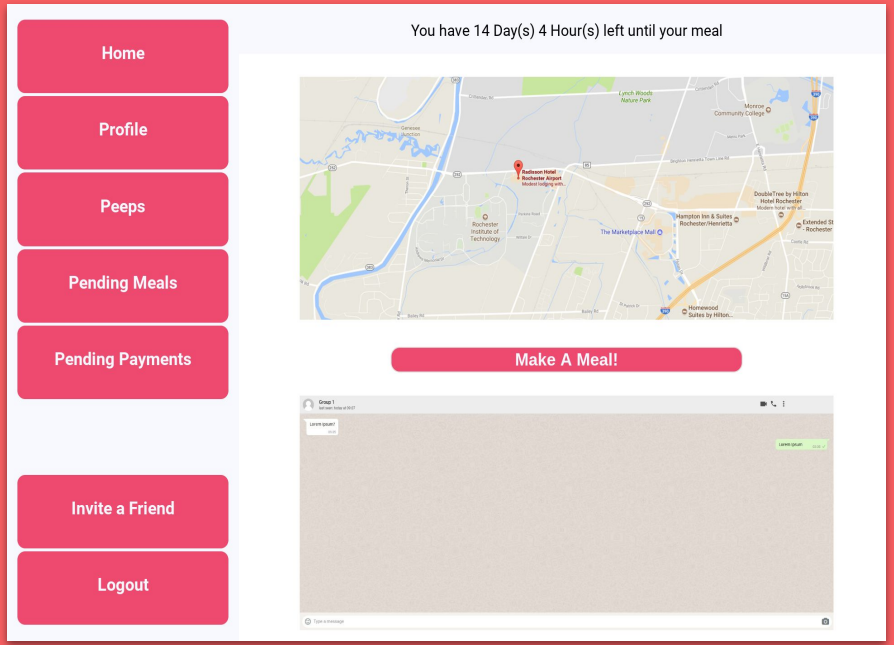
- Mock with some real functionality
  - Groups
- Took a lot of the user input into consideration
  - Back Buttons
  - Responsive Feedback
- Much better for showing others our idea

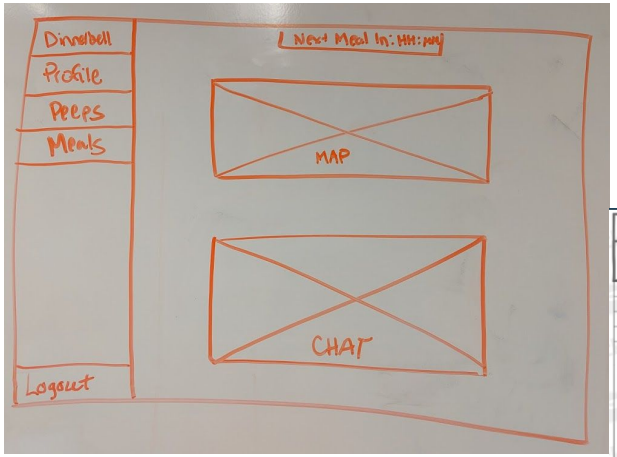


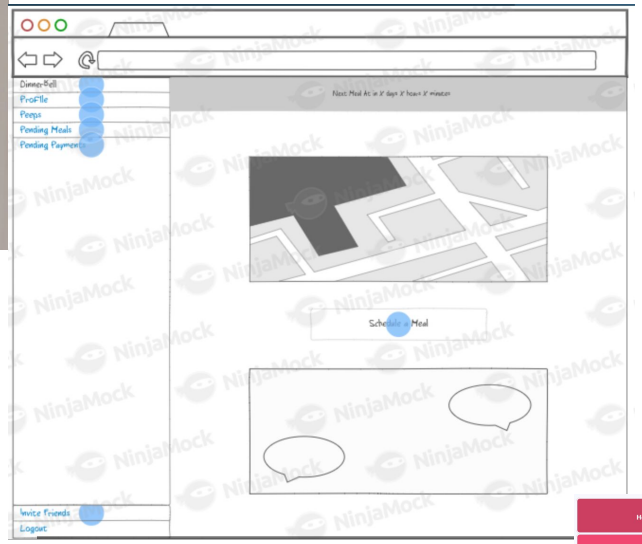
Design Evolution

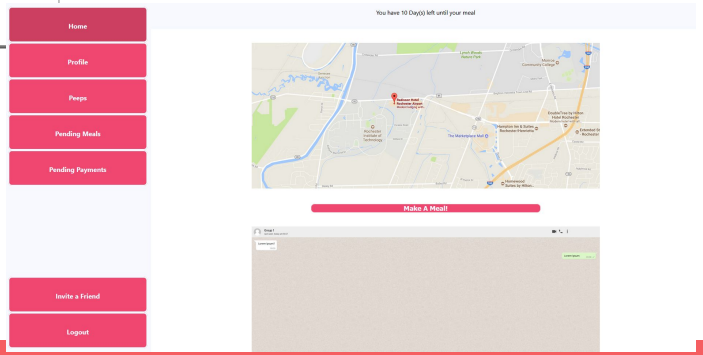
High-fidelity Prototype

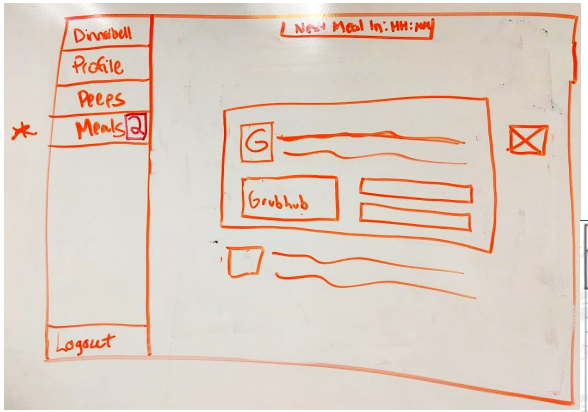
- Responsive Design
- Single Page Application
- Added color and style
- Able to navigate like with the mock, but also functionality
  - Create groups
  - Schedule meals
  - Edit profile

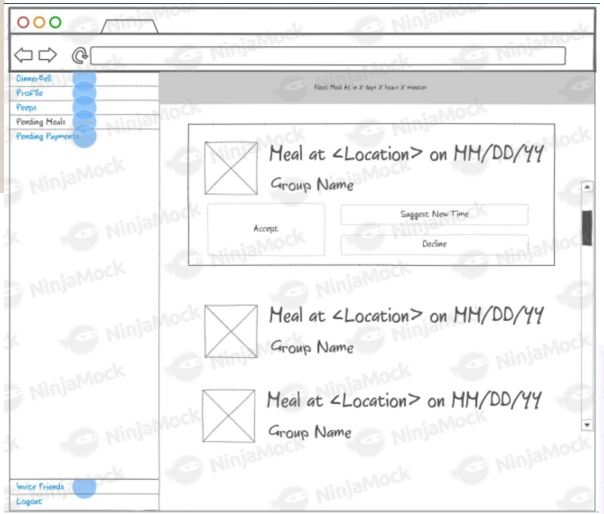


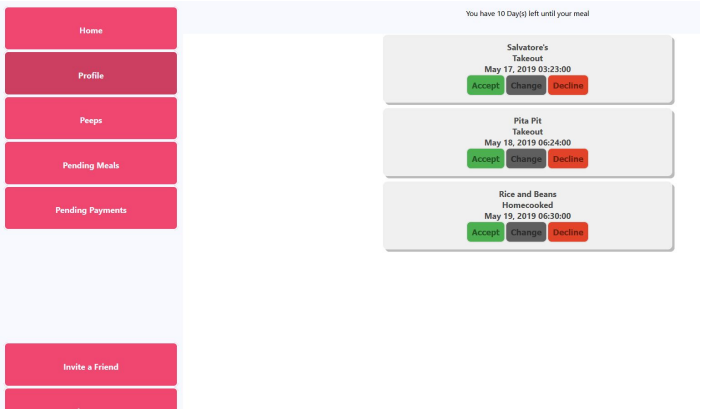

Dinnerbell
Next Meal In: HH:mm
Profile
Peeps
Meals
MAP
CHAT
Logout

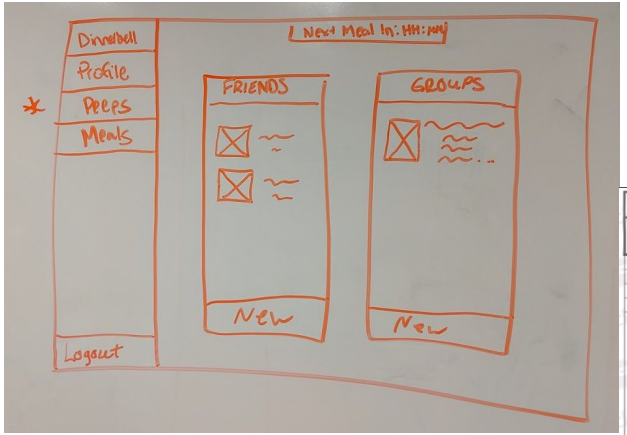

Dinner Bell
Profile
Peeps
Pending Meals
Pending Payments
Next Meal At: x days X hours X minutes
Schedule a Meal
Invite Friends
Logout

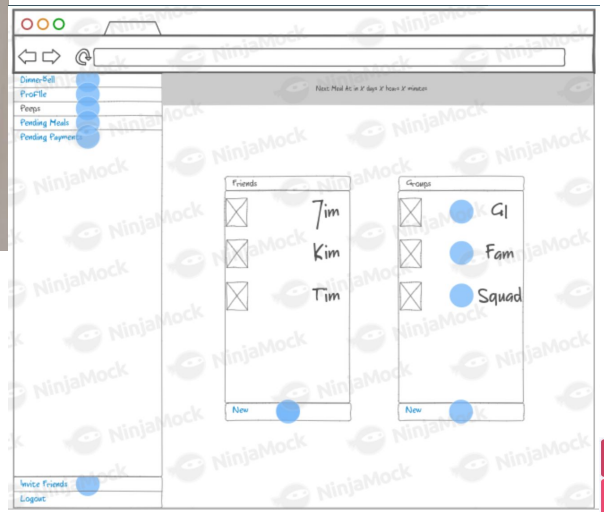

Home
Profile
Peeps
Pending Meals
Pending Payments
Invite a Friend
Logout
You have 10 Day(s) left until your meal
Make A Meal!

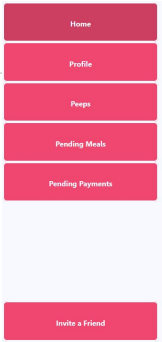

Dinnerbell
Profile
Peeps
Meals
Next Meal In: HH:MM
Grubhub
Logout

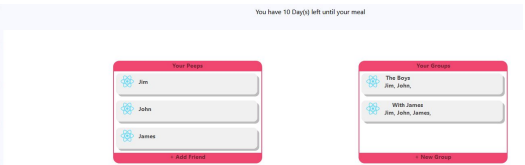

Dinner-Bell
Profile
Peeps
Pending Meals
Pending Payments
Next Meal At: in X days X hours X minutes
Meal at <Location> on MM/DD/YY
Group Name
Accept
Suggest New Time
Decline
Meal at <Location> on MM/DD/YY
Group Name
Meal at <Location> on MM/DD/YY
Group Name
Invite Friends
Logout


Home
Profile
Peeps
Pending Meals
Pending Payments
Invite a Friend
You have 10 Day(s) left until your meal
Salvatore's
Takeout
May 17, 2019 03:23:00
Accept
Change
Decline
Pita Pit
Takeout
May 18, 2019 06:24:00
Accept
Change
Decline
Rice and Beans
Homecooked
May 19, 2019 06:30:00
Accept
Change
Decline


Dinnerbell
Profile
Peeps
Meals
Logout
Next Meal In: HH:MM
FRIENDS
New
GROUPS
New


Dinner Bell
Profile
Peeps
Pending Meals
Pending Payments
Invite Friends
Logout
Next Meal At: in X days X hours X minutes
Friends
Jim
Kim
Tim
New
Groups
GI
Fam
Squad
New


Home
Profile
Peeps
Pending Meals
Pending Payments
Invite a Friend


You have 10 Day(s) left until your meal
Your Peeps
Jim
John
James
+ Add Friend
Your Groups
The Boys
Jim, John,
With James
Jim, John, James,
+ New Group

Evaluation

Pros

- Color Design
- Useful Concept
- Responsive

Cons

- Confusing Naming Scheme
- Odd Grouping of Functionality
- Confusing Group Creation
- Web App, not Phone App

Demo

Reflection

- Process
  - Information gained from User Testing
- Prototyping
  - Not Enough Time
  - Unclear Design Philosophy
- Usability
  - Keyboard Users
  - Screen Readers

Thank You

Deliverable 9: Presentation and Final Release (100 pts)			0f 100
Final Release (50 pts)			
README file complete and accurate (20 pts)			
Running prototype - subjective review, is this a "good" interface to support user goals and a positive UX? Are severe usability issues addressed? Is the prototype sufficiently complete to yield meaningful user testing results? Degree of difficulty and the state of completion versus the specified requirements are also factors. (25 pts)			
Status report updated (5 pts)			
Presentation (50 pts)			
Content (45 pts)			
System concept summary			
Design and usability requirements			
Discussion of design evolution and rationale from concept to detailed design			
Task based system demo, trace to requirements, how were usability requirements met, (30			
Evaluation and reporting - discuss significant formative evaluation findings, your usability testing data analysis and findings, changes made as a result of usability testing			
Project reflection			
Style (5 pts)			
Conveyed message/info clearly, prepared, professional, time used effectively, answered questions appropriately			

Deliverable 9: Presentation (50 pts) and Final Product with Updates (50 pts)

At the end of the semester, your team will give a 20-minute **presentation** of your project. Your talk will need to discuss the following:

1. Summarize the **system concept**.
2. Summarize the **interactive design and usability requirements** in reference to the primary **work roles**.
3. Discuss how your **design evolved** through conceptual, intermediate, and detailed designs. Show sample screen shots. Explain your design rationale as the design evolved. What metaphors, affordances, and design principles were employed?
4. **Demonstration**. Demonstrate your design and implementation via a live demo of your system, working through the five tasks. How were usability requirements met in the design?
5. **Evaluation and Reporting**. Discuss the major findings from your evaluations (cognitive walkthrough, heuristic evaluation, and user testing). Include a discussion of the testing data you collected and your analysis. Did you meet the usability requirements? Show traceability between problems identified and subsequent changes to the design.
6. **Reflection**. Reflect on what went well and what could be improved in the project, particularly relating to usability but also for general software engineering concerns.