

Members: Chris.H ; Orgil.S ; Nestor.V

Study tasks

Prototype - A

Used double space to group up layers of tasks.

1. Open application.
2. Enter username and password **OR** sign up.
3. A. If you hit **sign in** then the home page will be present.
B. If you hit **sign up** then you will need to enter your personal information. After you press save, you will go to the home page.
4. In this Home page:
A : you can explore your existing teams.
B : If the game is in session, go to the real-time simulator.
5. Team info page:
A: You can add a player to a team.
B: Explore pre-existing formations.
C: Send an alert to players via SMS.
6. The real time simulator page:
A: You can start and end recording the current real-time game.
B: Substitute a player in a real-time.
7. Player registration page: You will register a new player.
8. Existing formations page:
A: Choose a formation and try it on the field.
/ It will redirect you to the real-time simulator.
Also, you can alert players by just pressing their dot icon. It will buzz their belt./
B: Create a new formation.
9. Substitution page:
A: Select player from the real-time screen first then press desired sub-player from the bottom pool.
10. Formation page: Create new formation by just dragging players into the screen.
11. Menu bar at the left corner: You can do minor features here.
A: Contact info : will show contact information of the host company
B: Settings : will ask you to edit or update your profile.
C: Teams: will direct you to the homepage where you can see teams.
D: Rate us: will direct you to app-store rating system.
E: Legal : will display end-user agreement.

Prototype - B

Used double space to group up layers of tasks.

1. Open application.
2. Enter username and password **OR** sign up.

3. A. If you hit **sign in** then the home page will be present.
 B. If you hit **sign up** then you will need to enter your personal information. After you press save, you will go to the home page.
4. In Home page:
 - A : you can explore your existing teams.
 - B : You can add a new player to the roster
 - C : You can create a new team
 - D : You can edit any of the previous
 - The editing and creation pages have the same template and functionality
5. Team menu page:
 - A: You can edit the starting squad
 - B: Explore existing formations.
 - C: Send an alert to players via SMS.
 - D: Make direct substitutions
 - E: Add a player to this team
 - F: Begin the recording of a game
6. The Live game page:
 - A: You can see live feedback of the squad positioning
 - B: end recording the current real-time game.
 - C: Substitute a player in a real-time.
 - D: You have the game score info displayed
7. Player registration/edit page: You will register/edit a player.
8. Existing formations page:
 - A: Choose a formation and try it on the field.
 / It will redirect you to the real-time simulator.
 Also, you can alert players by just pressing their dot icon. It will buzz their belt./
9. Team Stats:
 - A: A display of the team current stats of game performance.
10. Team creation/edition page:
 - A: Add the information of the team, such as sport, division, roster size, etc.

Part 1: Usability Testing

- Participant 1 (Name)
 - What did you like about Prototype A?

- Participant 1 liked the ability to switch between different sports on the home screen she mentioned that having it on the first page makes it easier for a coach like her that teaches two sports (soccer and hockey) to get set up.
 - What did you dislike about Prototype A?
 - The participant didn't like the substitution screen, not only did she state that she thought it was a play substitution button, she thought that it would be a distraction to look at a screen while coaching, that the players should just switch belts when being substituted and that this would eliminate the need to have the player's names in the app.
 - What did you like about Prototype B?
 - The participant liked how this prototype is visually appealing. The presentation of the squad formation was really clear for the participant, as well as the editing pages.
 - What did you dislike about Prototype B?
 - Only seemed to be focused on football/soccer games. Some background were a little confusing, not that much, but some letters were lost when combined with the background.
 - What was confusing about these prototypes?
 - She stated that she was initially confused by FIGMA, she initially thought it was a fully developed app. We had to explain the current state of the prototypes to ensure she could have an objective opinion of them (not complain about lack of functionality)
- Participant 2
 - What did you like about Prototype A?
 - Participant 2 liked the amount of options in the app, they also stated that the ability to change formations made sense.
 - What did you dislike about Prototype A?
 - The participant didn't like the size of the font of the size of the buttons, the participant is older as well as doesn't use a smartphone, they also wanted the formation button on the home screen.

- What did you like about Prototype B?
 - The harmony on the style of the prototype, the display of information and the backgrounds define a personality for the whole app. The Live game page looks really good.
- What did you dislike about Prototype B?
 - The lack of a menu bar, it would be really helpful to have all the options of the prototype right away from any page.
- What was confusing about these prototypes?
 - User did not know how to make connections between pages of the prototypes. Said there wasn't a clear link between pages yet.
- Participant 3
 - What did you like about Prototype A?
 - Participant 3 liked the ability/placement to view the formations.
 - What did you dislike about Prototype A?
 - The participant didn't like the overall look of the prototype (color/readability gave the user a bit of eye strain), he also didn't think the need to record in the real time screen necessary as the use of the belt should keep the recordings similar.
 - What did you like about Prototype B?
 - The soccer emphasis on the prototype looks great, it is really appealing and professional looking. It almost feels like managing a team on a video game.
 - What did you dislike about Prototype B?
 - Thinks that there is still so much unused potential in the product. Adding personal stats for each player could be really good.
 - What was confusing about these prototypes?
 - User was familiar with Figma and did not found any great confussions during the testing

Study report:

- Participant 1
 - Study Session #1, 11/28/18, 7:00 PM, Denver, CO
 - Study participant info: Melissa, Homemaker and public school league coach
 - Orgil conducted study, rest of group helped
 - Observations from Prototype A: What happened when testing prototype A? Did you notice anything surprising? Any confusion or mistakes?
 - This test went smoothly and we got some great feedback. The only confusion was with Figma, the participant thought that the FIGMA was a fully functional phone app and was confused by not being able to input real data or see real formations, we remedied this confusion by explaining FIGMA to the participants.
 - Observations from Prototype B: What happened when testing prototype B? Did you notice anything surprising? Any confusion or mistakes?
 - Same Figma confusion. She was impressed with the visuals on the app, although a little bit disappointed for the lack of other sports support in the app. She asked for a volleyball support.
 - Participant feedback: Summarize the participant's answers to the 6 questions above, plus any other questions you asked.
 - The idea is really good for her and at first hand appealing to use. She feels identified with the need of having this kind of tracking devices and apps.
- Participant 2
 - Study Session #2, 11/28/18, 6:15 PM, Denver, CO
 - Study participant info: Andrew, mail carrier and public school league coach
 - Chris conducted the study, rest of group helped
 - Observations from Prototype A:
 - The participant had difficulties navigating the FIGMA, as using a phone interface was very foreign to them, possibly we should to

some research into integrating traditional forms of presenting game information (playbooks and symbols).

- Observations from Prototype B: What happened when testing prototype B? Did you notice anything surprising? Any confusion or mistakes?
 - He liked the visuals and the simplicity of the app. The only problem was that he got lost between pages and was looking for a menu bar. The team stats page was his favorite one in here.
- Participant feedback: Summarize the participant's answers to the 6 questions above, plus any other questions you asked.
 - Most of Andrew's feedback about the difficulties was due to his inexperience with apps and smartphones which led his feedback to skew poorly, we also asked if Andrew could provide feedback in the future as he clearly has a POV that we haven't been designing for.
- Participant 3
 - Study Session #3, 12/2/18, 9 AM, Boulder, CO
 - Study participant info: Crandis, Student
 - Nestor conducted the study rest of the group helped
 - Observations from Prototype A: What happened when testing prototype A? Did you notice anything surprising? Any confusion or mistakes?
 - It was surprising the eyestrain the user got from the FIGMA, the user tended to use night mode on their own phone, this shouldn't be an issues as the app will usually be used outside.
 - Observations from Prototype B: What happened when testing prototype A? Did you notice anything surprising? Any confusion or mistakes?
 - The user found the prototype really straightforward, feeling familiarized to a video game team-management tool, identified the inspiration we got from the most popular sport games and thought it was a good prototype
 - Participant feedback: Summarize the participant's answers to the 6 questions above, plus any other questions you asked.
 - The idea is great, the prototypes clearly transmit the objective of the project and the basic utilities to make it successful, the issue is that Crandis still feels there is still so much area for improvement

Part 2: Heuristic Evaluation

Prototype	Heuristic	Tester
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A	Visibility of system status	Orgil.S
A	Match between system and real world	Orgil.S
A	User control and freedom	Orgil.S
A	Consistency and standards	Orgil.S
A	Error prevention	Orgil.S
A	Recognition rather than recall	Chris H
A	Flexibility and efficiency of use	Chris H
A	Aesthetic and minimalist design	Orgil.S
A	Help users recognize,diagnose, and recover from errors	Orgil.S
A	Help and documentation	Orgil.S
B	Visibility of system status	Nestor V.
B	Match between system and real world	Nestor V.
B	User control and freedom	Nestor V.
B	Consistency and standards	Nestor V.
B	Error prevention	Nestor V.
B	Recognition rather than recall	Chris H
B	Flexibility and efficiency of use	Chris H

B	Aesthetic and minimalist design	Nestor V.
B	Help users recognize,diagnose, and recover from errors	Chris H

UAR of all members are included in the following pages.

UAR #: 1	Problem/Good: Problem	Rated by: Orgil.S
Name: Prototype-A. Sign-out.		
Relevant heuristic: Match between system and real world		
Steps to reproduce: Adding sign out button.		
Detailed explanation: If multiple coaches use a single device our tool was failing because we were lacking sign-out button.		
Possible solution: Sign-out button will be added to the menu bar at the left corner.		
Severity (low, medium, high, critical): Medium.		See also:

UAR #: 2	Problem/Good: Good	Rated by: Orgil.S
Name: Prototype-A. Buzz		
Relevant heuristic: Aesthetic and minimalist design.		
Steps to reproduce: It's in flawless form.		
Detailed explanation: While user is in the real-time simulator, touching their icon to buzz them is the way of alerting them.		
Possible solution: Coach can yell.		
Severity (low, medium, high, critical): medium.		See also:

UAR #: 3	Problem/Good: Problem	Rated by: Orgil.S
Name: Prototype-A. Password		
Relevant heuristic: Help users recognize,diagnose, and recover from an error.		
Steps to reproduce: Might need to create a forgot a password button where user can send a request for a new password.		
Detailed explanation: If the user forgets their password, there won't be any way of retrieval. Unless they literally use our contact information.		
Possible solution: By foreseeing this kind of situation we will add a forgot password button on the welcome page.		
Severity (low, medium, high, critical): critical		See also:

UAR #: 4	Problem/Good: Good	Rated by: Orgil.S
Name: Prototype-A. Alert		
Relevant heuristic: Aesthetic and minimalist design.		
Steps to reproduce: More creative way of sending notification.		
Detailed explanation: So far, coaches can send a notification to players phone number. Phone number will be linked to tracker serial number. So, coached doesn't know individual phone numbers, which is good for any kind of possible harassment situations.		
Possible solution: Coach can do team meeting.		
Severity (low, medium, high, critical): low		See also:

UAR #: 5	Problem/Good: Good	Rated by: Orgil.S
Name: Prototype-A. Real-time		
Relevant heuristic: Visibility of System status.		
Steps to reproduce: So far nothing to reproduce.		
Detailed explanation: Real-time simulation of the field is perfect visibility of the system status because user is always aware of the system status in a real-time.		
Possible solution: Maybe throw some error message if something happens. / Not necessary, Since user can see it in the real-time simulator. Meaning that simulator will crash if something happens./		
Severity (low, medium, high, critical): medium		See also:

UAR #: 6	Problem/Good: Good	Rated by: Nestor V.
Name: Prototype-B. Live Game		
Relevant heuristic: Match between system and real world.		
Steps to reproduce: It's in flawless form.		
Detailed explanation: The visual representation of the field is really good as it simulates a complete soccer field, detailing precisely the position of each player like an aerial view.		
Possible solution: Coach can place himself on an elevated panoramic position from the stands.		
Severity (low, medium, high, critical): medium.		See also:

UAR #: 7	Problem/Good: Problem	Rated by: Nestor V.
Name: Prototype-B. Text visualization		
Relevant heuristic: Aesthetic and minimalist design.		
Steps to reproduce: The edition of the background display and blurriness.		
Detailed explanation: In some pages, the background chosen can make some text hard to read and identify		
Possible solution: Change the background image completely or only make an edition so the blurriness of the background can help with the visualization of text.		
Severity (low, medium, high, critical): high.		See also:

UAR #: 8	Problem/Good: Problem	Rated by: Nestor V.
Name: Prototype-B. Menu bar		
Relevant heuristic: User control and freedom		

Steps to reproduce: Evaluate the necessity of the creation of a menu bar.	
Detailed explanation: Although there is an easy way to navigate between pages, some users marked up the lack of a menu bar like in prototype A. Is not critical and necessary, but it could give the user more movement freedom	
Possible solution: Create a side or lower menu bar to access directly all pages, settings, home, ad sign out.	
Severity (low, medium, high, critical): medium.	See also:

UAR #: 9	Problem/Good: Good	Rated by: Nestor V.
Name: Prototype-B. Pages layout		
Relevant heuristic: Consistency and standards		
Steps to reproduce: Nothing to reproduce		
Detailed explanation: There is a consistency on the pages layout of information. They all represent good harmony, spacing, mapping, constraints and feedback.		
Possible solution: To accomplish a good individual experience for users, maybe a theme tool to change the color layouts or backgrounds. Not necessary, but ay be a good touch.		
Severity (low, medium, high, critical): low.	See also:	

UAR #: 10	Problem/Good: Problem	Rated by: Nestor V.
Name: Prototype-B. Text visualization		
Relevant heuristic: Error prevention		
Steps to reproduce: Create a deletion page to manage and delete current roster and teams		
Detailed explanation: If we need to erase a player or the coach stops working with an specific team and need to erase it from his teams list, there is no way to manage that as they are gonna stay o the database forever.		
Possible solution: Add a deletion button to permanently erase teams and players from a coach's account.		
Severity (low, medium, high, critical): high.	See also:	

UAR #: 11	Problem/Good: Problem	Rated by: Chris H
Name: Prototype-A. "buttons".		
Relevant heuristic: Consistency and standards.		
Steps to reproduce: Check wording on buttons.		
Detailed explanation: Some wording on the buttons can be confusing to the user.		
Possible solution: Changing wording on some of the buttons.		
Severity (low, medium, high, critical): Minor usability problem (fix with low priority)	See also:	

UAR #: 12	Problem/Good: Problem	Rated by: Chris H
Name: Prototype-A Substitutions placement		
Relevant heuristic: Flexibility and efficiency of use.		
Steps to reproduce: Placement of the substitution button is in the real time simulation screen		
d explanation: access to substitutions will most likely be more important than the ne simulation as thus should be unbundled.		
Possible solution: Place substitutions onto the home screen.		
Severity (low, medium, high, critical): medium. Minor usability problem (fix with low priority)		See also:

UAR #:13	Problem/Good: Good	Rated by: Chris H
Name: Prototype-B. Design		
Relevant heuristic: Aesthetic and minimalist design.		
Steps to reproduce: General look of the app.		
Detailed explanation: App has a good material design that will help guide older users interact with the app.		
Possible solution:		
Severity (low, medium, high, critical):		See also:

UAR #: 14	Problem/Good: Problem	Rated by: Chris H
Name: Prototype-A&B Player name.		
Relevant heuristic: Flexibility and efficiency of use		

Steps to reproduce: Player Name screen and use.	
Detailed explanation: Possible removal of the player name screen.	
Possible solution: Possible removal of the player name screen to speed up interactions. Instead of having the coach search for the specific player they could just call on them and switch position belts while on the field.	
Severity (low, medium, high, critical): medium	See also:

UAR #: 15	Problem/Good: Problem	Rated by: Chris H
Name: Prototype-B		
Relevant heuristic: Aesthetic and minimalist design.		
Steps to reproduce: Nothing to reproduce.		
Detailed explanation: Readability Might affected by the background and color of the text.		
Possible solution: Change to a solid color background/foreground, and/or make font more bold.		
Severity (low, medium, high, critical): medium	See also:	