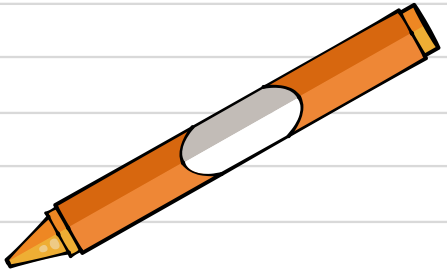
INST 362

GGG Presentation

Mandy Chan, Geoffrey DeMattia, Ethan Do, G Goodwin,
Joaquin Panambo, Hanna Zakharenko

Introduction, Background, & Key Insights

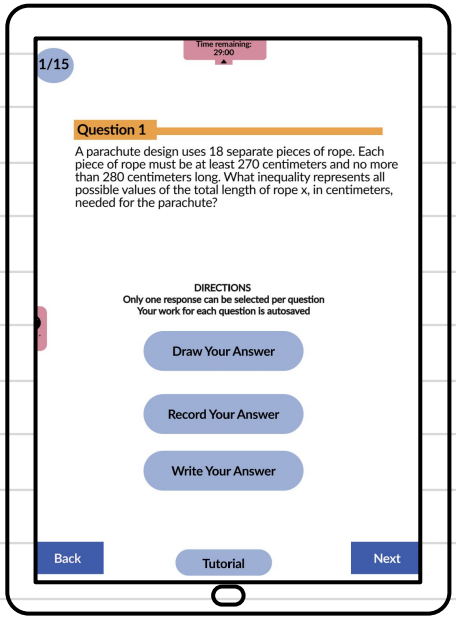


Introduction, Background, Context

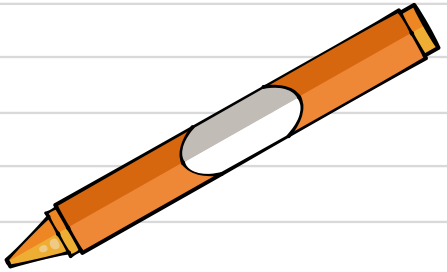
- At first our group was unsure what topic to address
- Found common ground with the concepts of standardized testing and learning styles
- **Project changed focus over time to primarily be about standardized testing and testing in general as during our interviews we found our target users to be more unfamiliar with learning styles than expected**
- During the prototyping phase we decided to **keep some references to learning styles while redesigning the test answer format**
- We included drawing, recording, and different writing options in the final design

Key insights from Contextual Inquiry Research

- We found that many people do not enjoy taking standardized tests
- **A big part of standardized testing is the answer format**
- **Multiple choice questions are not very flexible and do not allow for partial credit**
- Our design acts as a supplement to multiple choice questions with **more flexibility and range in response format and availability of partial credit**
- Users can use a tablet to draw something, record themselves speaking, or “handwrite” / type answers
- These options intend to make the test taking process easier, faster, and more intuitive for students



Ideation, Testing, & Prototyping

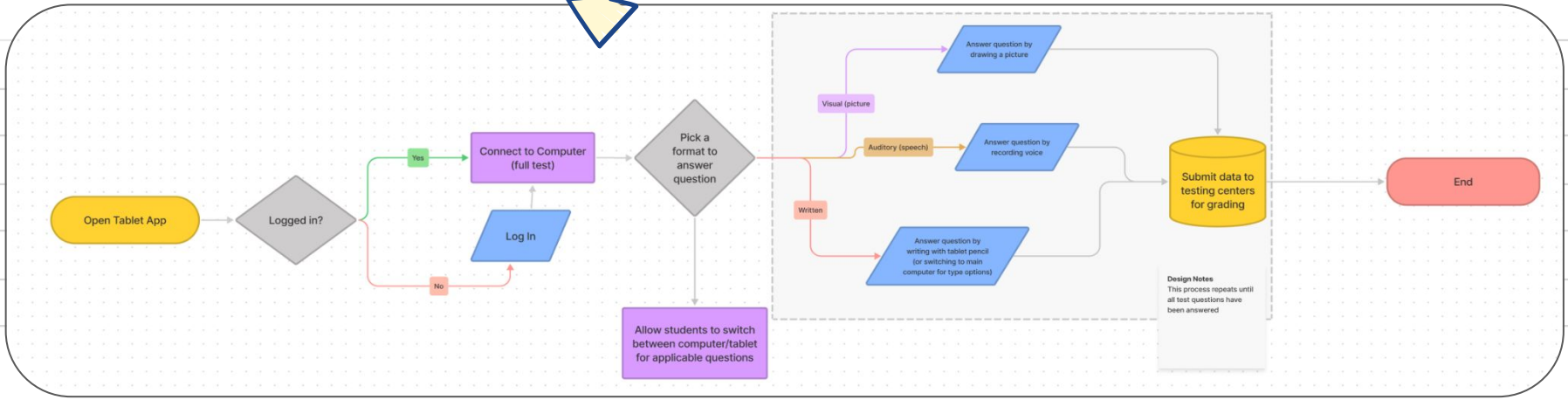


Ideation: Low-Fi Prototype

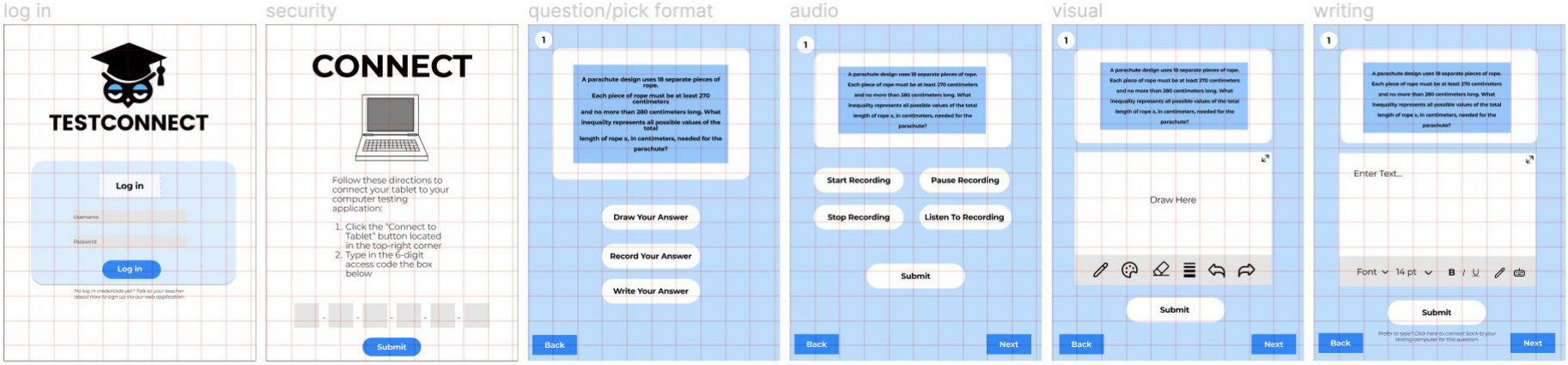
- In response to research insights, we wanted to create an app that gives users **more flexibility in their test question responses**
- This flow chart describes **the ideal process users will go through** when using the app during a test

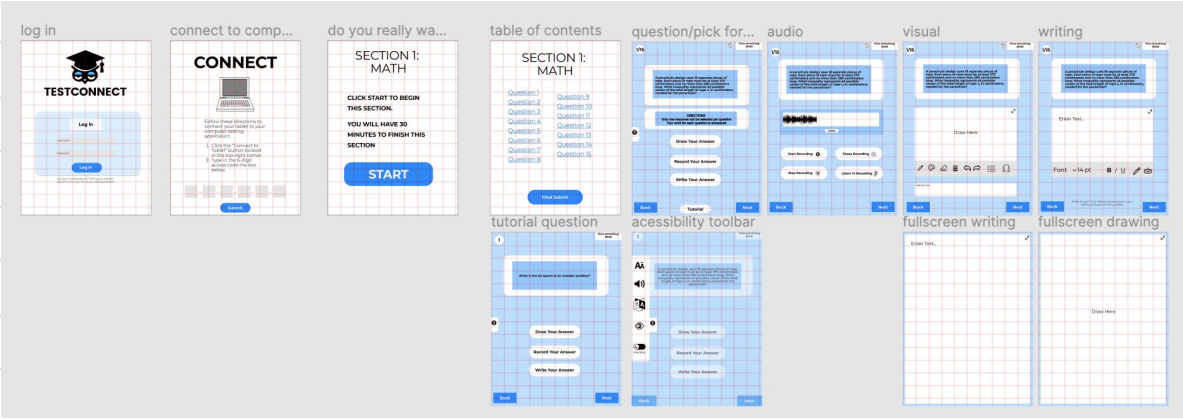
Low-fi Prototype Design

User Story: Cedric has taken the SAT and was not happy with his score. This does not bode well for his college applications. He does well on tests in his class and finds his teacher's use of visual aids very helpful. When it comes to standardized tests, Cedric feels the current tests ask confusing questions and are hard to picture when reading them. He wishes there was another option for him to take the test. An ideal testing format would be online, allow him to write out his work so he can see all of his logic, respond to the questions in different ways, include more visual aids, and grade for partial credit.



Testing: Mid-Fi & Beta Prototypes

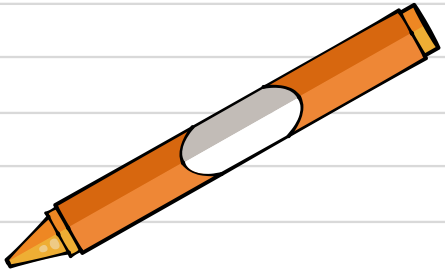




Changes Made Based on Interviews:

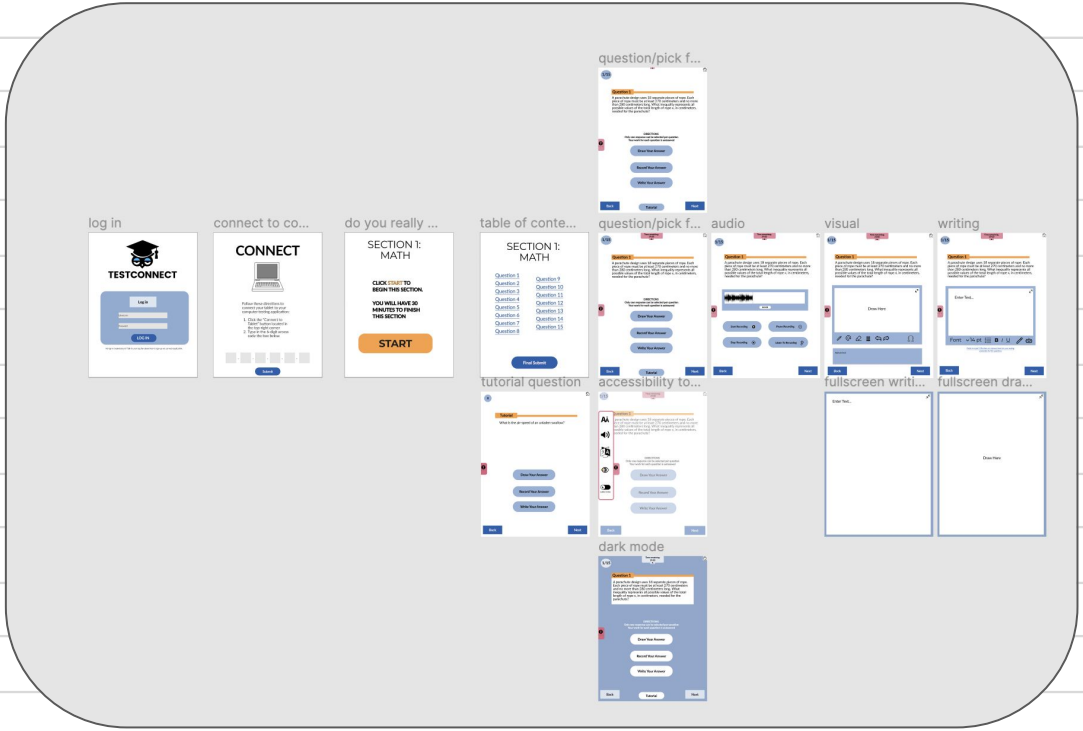
- Accessibility tab
  - Change font and icon size
  - Different language options
  - Read out loud option
  - Dark Mode
- Timer feature
- Practice question/tutorial
- Test introduction screen
- Screen to see all questions

Final Prototype, Demo, & User Journey Map



Final Prototype & Demo

- Changes included:
  - Color palette to be more readable
  - Adjusted certain features to be easier to use
- Final prototype demonstration in Figma



User Journey Map

Persona: Cedric

Scenario: Cedric has taken the SAT and was not happy with his score. This does not bode well for his college applications. He does well on tests in his class and finds his teacher's use of visual aids very helpful. When it comes to standardized tests, Cedric feels the current tests ask confusing questions and are hard to picture when reading them. He wishes there was another option for him to take the test and ways to answer the questions that account for his answering process and the effort put in. An ideal testing format would be online, allow him to write out his work so he can see all of his logic, respond to the questions in different ways, include more visual aids, and grade for partial credit.

Goals: Cedric, a senior in high school, struggles to do well with standardized testing, which he needs a passing grade on in order to graduate high school. He also wants to get into a good college and knows scoring well on a standardized test, like the SAT or ACT, will help. He performs pretty well on tests within his classes, and he especially enjoys his history class. However, when it comes to standardized testing, he can't seem to maintain focus and always feels like he makes stupid mistakes. He's tried different study books/methods, but he thinks the issue might lie within the standardized test itself.

Expectations: Cedric wants to succeed and score well on standardized tests but finds himself struggling with the questions and answer format. This leads to him not fully understanding the questions, what they are asking, or how to respond and scoring poorly. He wold like it if the test allowed him to respond with pictures or verbally like in class.

Touchpoints of Product: Test question response (answer format) flexibility and range of options. The design encourages students to answer questions in different ways (i.e. writing/speech/pictures/etc.) and assign grades based on partial correctness. The accessibility bar includes options to in

Opportunities, insights, and internal ownership: Some curiosity about answering in multiple formats, more in depth visualization and modeling of tools in accessibility bar, have the timer not displayed by default/have the option to display the timer to reduce test anxiety, easy to navigate, intuitive layout, future modeling of technical aspect of answer formats instead of just the visual design

User Actions and Feelings	Phase 1 - Cedric Starts Taking SAT	Phase 2 - Open App & Connect to Test	Phase 3 - Answer Questions	Phase 4 - Continue and Finish the Test
Actions	Cedric enters the testing room and sits down at a a computer and is handed a tablet. He logs into the computer and starts up the tablet to access the testing app	Cedric opens the app, logs in with his student information, and connects the tablet to his computer with the main test.	After reading the question, the user will select their preferred answer format. The user can visit each option and try to answer the question. Cedric submits his answer in one format as specified in the instructions.	Cedric clicks to the next question and repeats the answering process until he completes the test.
Thoughts	"The testing proctor said they are using a new tool to help with answering questions. I hope I can use this tool to help me with my test." "I hope this format will be more flexible than traditional tests."	"It's really easy to follow along, the start page only has one option so I am not confused." "I think it's cool I can see the time remaining and list of questions."	"I need to pick a response format that works best for this question." "I'm glad there's a back button so I can go back and explore each answering format" "I might want to hear the question read aloud or see if there's a dark mode or bigger font to reduce strain on the eyes. Nice to have an accessibility bar." "I can examine the functionality bar to change font or brush size to make the test easier to read." "Now I just need to review my response before submitting." "I am assuming the next button will take me to the next question."	"I Will need to press the "Next" button to answer the question and move on." "The final submit button makes it really clear when I will no longer be able to change my answers."
Emotions	Cedric feels nervous about taking the SAT because he has not scored too well in the past	Cedric is excited to open and explore the supplemental testing app. He feels like the app is secure because he put in special code.	Cedric feels happy there are different options for how to answer the questions. Cedric feels curious about trying the different answer formats to find the one that best suits him best.	Cedric no longer feels as nervous, instead he feels confident about the test because he knows he can use the different answer formats to his advantage. He also feels comfortable using the app to answer questions.

- Cedric, our persona is your typical high school student taking the SAT
- Cedric starts his test by logging into the computer and connecting the tablet with the testing app
- Cedric exploress the range of response format options for each question and picks the one he feels most comfortable for each question
- Cedric leaves this version of the SAT feeling more confident because he was able to explain his answers instead of guessing a letter for multiple choice