

# CiviTutor

## The Team

Project Manager: John Akers

User Researcher: Victoria Lindsay

Design Writer: Brynn Tweeddale

Storyboard Designer: Nick Chang

## Problem and Solution Overview

Immigrants currently make up over 12% of the American population. Of this 12%, many will be seeking to go through the difficult and long process of naturalization, or obtaining citizenship. Citizen status is important to be able to vote, work, go to school, and obtain other benefits while living in the United States. Part of the naturalization process requires that applicants must demonstrate an ability to read, write, and speak in ordinary usage in the English language. This is reasonable for the majority of applicants, but there are certain immigrant groups that due to certain circumstances are not comfortable enough with the language to allow a valid interview in English. Those with disabilities or seniors that have legally resided in the States for a certain time frame are permitted to apply for an exemption from the English language requirement, but are still required to take the civics portion in their native language.

The problem is that many of the resources created to study for the civics test are also written in English, making it harder for those not familiar with the language to study. Currently, government web pages are a great resource in studying for the tests, and are even provided in several different languages. But while these sites are accurate and kept up to date, they can be hard to navigate and find the information that you are searching for. So despite the giant trove of facts, naturalization applicants still have a difficult time becoming familiar with the information required on the civics test. Therefore, the main idea for our proposal is to focus in on one specific demographic (in our case, native Spanish speakers), and create resources that are tailored towards that demographic to make it easier to understand and more convenient for them to pass the civics test portion of the naturalization process.

## **Design Research Goals, Stakeholders, and Participants**

The primary group we want to research are those from Spanish speaking countries who are either currently preparing for the Civics test or have taken the Civics test. The goals of researching this group would be to see through real time observation how they seek out information and prepare for the test. Currently we have a few people in these circumstances who we can speak to about their experiences either over video conferencing or in person. Outside of our given target population, there are many other stakeholders who may interact with our final design. The first of these groups is family and friends of test-takers who may either directly assist with studying or help search for resources. The second group to consider is government employees on the other side of the testing process who prepare and administer the Civics test. Interviewing both of these groups can provide valuable context into issues in the system that the test-takers themselves do not see or are directly impacted by. We already have channels of communication to these groups with personal connections to family members of test takers who we can speak to directly as well as contact information available online for members of the government in US Citizenship and Immigration Services that we may email or call to arrange further communication.

The research method that we will focus on are interviews. We have chosen this method for our research plan because it is the most feasible in the timespan that we have been given and the easiest to find people to complete. We were unsure how we would distribute a survey or find current immigrants in the area who are studying for the test, so interviewing seems like the best method to either ask about current or past experiences or the experiences of family members, etc. Interviewing can also pertain to a wide variety of stakeholders including the people who are taking or have taken the test, family members of those people, groups or organizations attempting to help those people, and the people who administer the Civics test.

## **Design Research Results and Themes**

We discovered that most people were able to prepare for the interview on their own, to the extent that they were successful when it came time to actually take the test. However, several of the people we spoke to said that language was a barrier to learning, and that they spent more time studying than they would have liked. Many people said that they would have preferred an interactive, or more visual learning experience, and that it was hardest to remember words and phrases that they weren't sure how to pronounce. While there are study materials available, they aren't as effective as desired. Additionally, a few people brought up the issue of self-accountability in finding the time to study.

Through our design process and feedback we have received, we have changed our focused tasks numerous times and focused down to two main tasks that our design will highlight. The first is practicing questions from the test individually in an interactive environment. The second task is studying better during group study sessions.

## **Task Analysis Questions**

**Who is going to use the design?** People preparing to take the citizen test, with English as a second language, and Spanish as their first language.

**What tasks do they now perform?** The study for the test using paper a sheet containing all the questions and answers, and reinforce their learning using paper practice exams, having friends read the questions aloud, or by scrolling through the flashcards on the government website.

**What tasks are desired?** They would like to study in a more interactive way as well as in physical groups to help each other.

**How are the tasks learned?** Paper practice tests and flashcards are given to them by the government, when their test is scheduled. These are commonly used tools, and are understood through prior knowledge.

**Where are the tasks performed?** People mainly study at home, although they may study in other places, for example during their commute or when they have free time. Currently the task required having paper copies, or access to the internet.

**What is the relationship between the person and data?** The data is the set of questions and answers. The people are trying to learn and memorize the data.

**What other tools does the person have?** Paper exams, flash cards, other family members who have already taken the exam.

**How do people communicate with each other?** This is mainly an individual task, however there are other associated tasks that involve communication: helping each other study, asking people about their experience with the test, reaching out to lawyers for advice, or reaching out to translators. The first two tasks are generally communicated in person. The following two may occur in person, over the phone, or via email.

**How often are the tasks performed?** People studied between 1-3 months for the citizenship test. Many said they studied a few times a week.

**What are the time constraints on the tasks?** The task: learning the data, must be achieved by the date of the citizenship test.

**What happens when things go wrong?** If they fail the test, they are allowed 2 more attempts. However after that they can lose the opportunity to become a citizen! Failure to attend the interview has the same consequences as failing, making scheduling an important part of the task.

## Preliminary Tasks

### Existing Tasks

1. **Learning names of elected officials:** Hector is looking at example questions for the citizenship civics test. He sees a questions asking who his state governor is. Hector realizes he doesn't have a clue, so he pulls out his smartphone and searches up "Arizona state governor" and learns it is currently Doug Ducey. He notices other questions pertaining to positions such as representatives and senators, so he goes on to look up "Arizona state representatives" and "Arizona state senators." Trying to commit what he needs to know for the test to memory, he realizes that he forgot the governor's name, so he goes back and searches him up again.
2. **Finding a study group:** Hector is trying to find people to study with in Phoenix, Arizona. He thinks it will help him prepare for the citizenship civics test. He expects there to be a local group, especially because he lives in a fairly large city with lots of immigrants. He looks up "citizenship test study group phoenix" on Google, but just finds preparation classes he can pay for or online courses. He is disappointed because he was hoping to find other people going through the same situation as him.
3. **Learning how to pronounce English phrases:** Grecia is studying for the citizenship civics test. She comes across an answer which must be said in English, "The Star Spangled Banner." She is not familiar with these words in English. On Google Translate, she copy and pastes the answer into the left box. On the bottom left, there is a speaker button that sounds out the phrase. It plays rather fast, so she clicks on it over and over again. She tries to copy the pronunciation, but she can't tell if she is saying the words correctly.

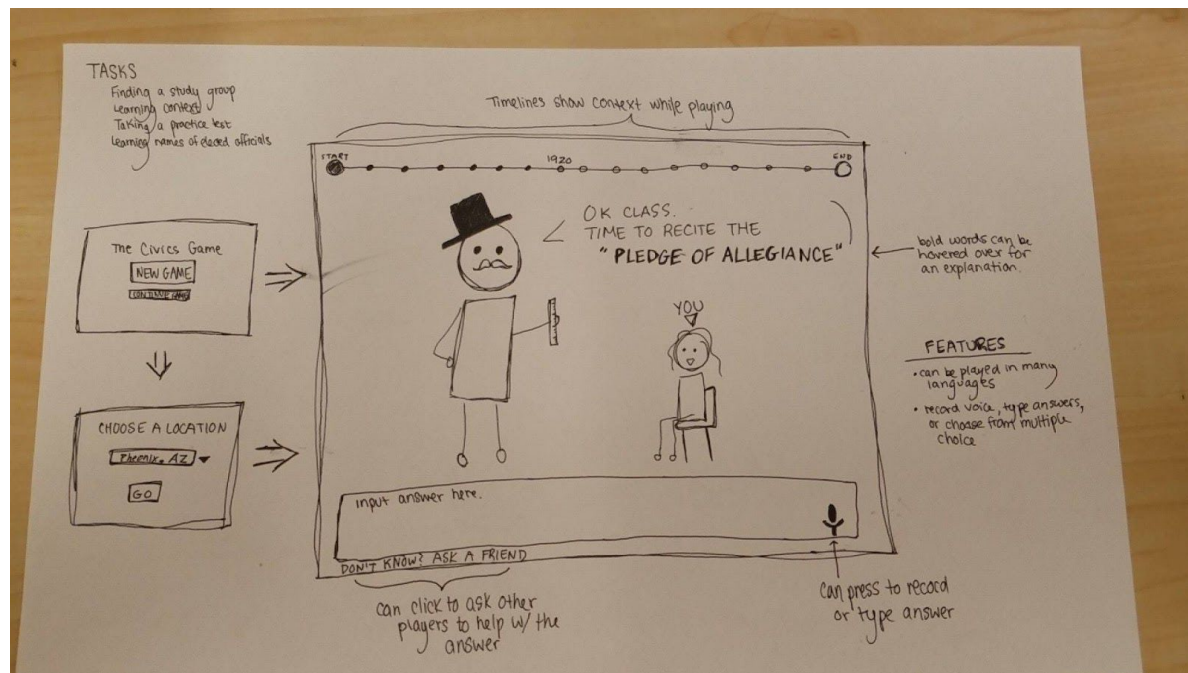
### Future Tasks

1. **Taking a practice test:** Hector feels like he has studied enough for the day, and is ready to take a mock test. He pulls out his phone and opens up his studying app. He navigates to the practice test feature. He first sees a screen that asks him to "Who is the President of the United States?" He is given 4 choices. He touches "B. Donald Trump." The app displays "Correct!" and shows he has gotten 1 out of 1 questions correct. He continues in this fashion until he reaches the end of the practice test, and goes over the questions that he got wrong.

2. **Find a testing location:** Grecia recently moved in with her children in San Francisco after living in her home in Los Angeles in a number of years. While she has been preparing for the citizenship test for a number of months, she is not familiar with the area or where the nearest office is located. On her device she uses her location data to find the nearest office to her new home which also provides her with details such as contact information as well as hours of operation.
3. **Learning context behind questions:** Grecia is reviewing questions from a practice test and comes across a question about who the current Speaker of the House of Representatives is. While checking the answer, she wonders what the role of the Speaker of the House actually is because she thinks it might better help her remember the answer. From her study materials she selects the more information option which provides a brief description about the role of the Speaker of the House as well as references to further information about the House of Representatives to learn more.

## Proposed Design Sketches

### Design 1: Interactive Web-Based Game



This design is an interactive computer game that allows the player to roleplay as a character through history in order to learn the context and meaning behind the questions asked on the U.S. Civics Test. It also gives the player an option to contact other players in order to get advice or help when they are stuck during the game.

**Task 2: Finding a study group**

The game makes all current players a study group for each other. When a player gets stuck during the game, they can use a help button to request assistance from other players, essentially creating a study group or support system for the user.

**Task 6: Learning context**

This game allows a player to play through history during the game. A timeline at the top of the interface helps the player know where they are in history. The game also acts out historical scenarios, allowing the user to get a better sense of how the information they are learning is related in history.

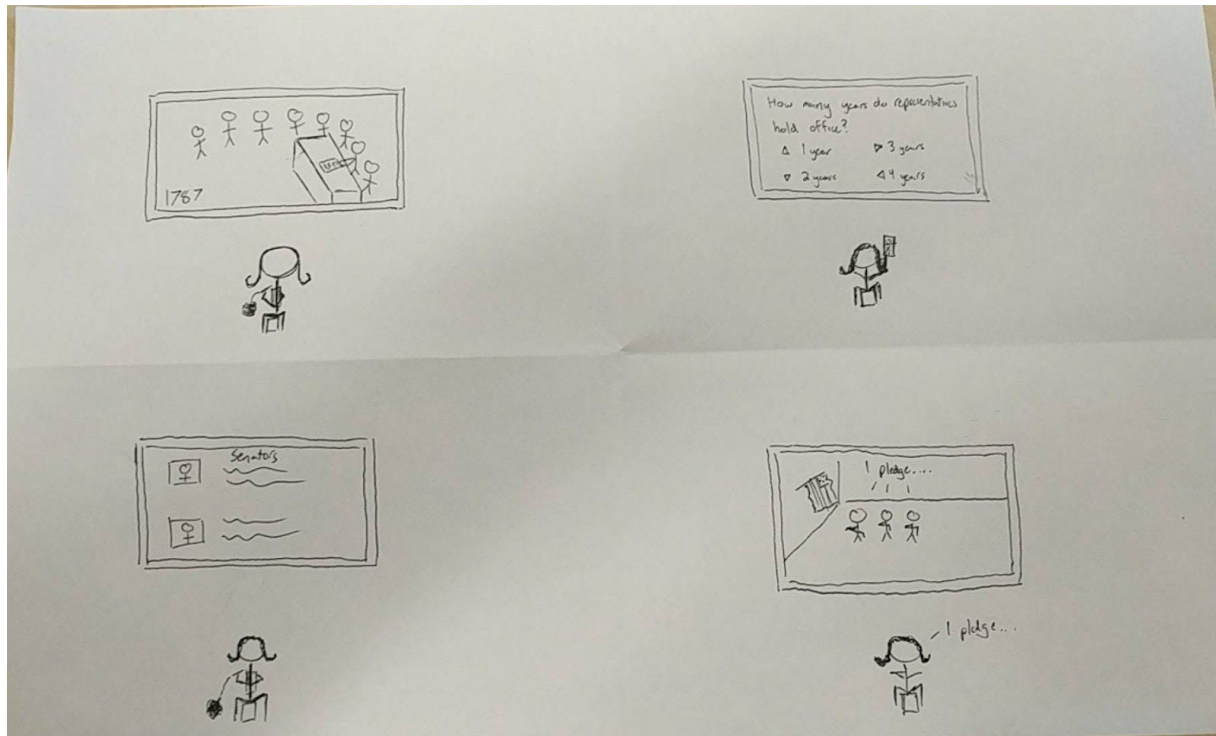
**Task 4: Taking a practice test**

The game itself serves as a practice test. Once the user has completed the game, they should have gained all the necessary knowledge needed to take the test. The game can be played multiple times to continue practicing.

**Task 1: Learning names of elected officials**

When the user first plays the game, they choose the location they are in. The game then adapts to give the questions pertaining to that location that the person will need to know.

## Design 2: Interactive Video Series



This design is in the format of a Spanish soap opera Blu-ray. It has different parts that help a citizenship candidate study for the civics test, including historical reenactment scenes, interactive practice tests, and more. This design format makes it easy to study from the comfort of your living room couch.

### Task 6: Learning context

The soap opera goes through various scenes that reenact important events in American history, such as the signing of the Constitution. This makes it easier to understand the information on the test in a more logical way.

### Task 4: Taking a practice test

There is a section on the Blu-ray that allows the viewer to take a practice test. Each question has a screen with a question and different answers, and the viewer selects an answer with their remote. The program shows whether you got it right or wrong before moving on to the next question.

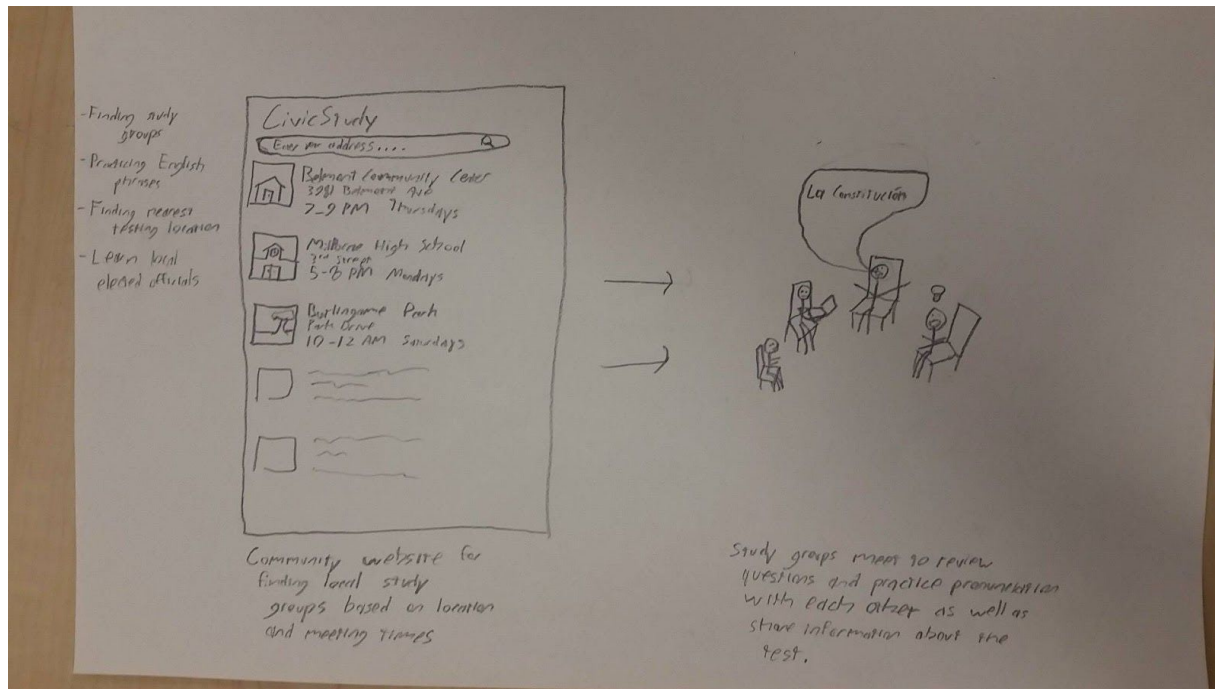
### Task 1: Learning the names of elected officials

The program allows you to select what state you're in and it displays all the local officials, including senators, representatives, and governors.

### Task 3: Learning how to pronounce English phrases

There is a part that is in English to help learn certain parts of the test that must be answered in English, such as what the national anthem is and the pledge of allegiance.

## Design 3: Web-Based Local Study Group Finder



This design mainly surrounds a community oriented website that uses location to find local study groups. The website facilitates easy search functionality by providing the location for each study group as well as the times and days of the week that they meet. Beyond finding study groups the website can utilize the provided location to display the closest USCIS office and local representatives.

### Task 2: Finding a study group

In order to find a study group, the first step is to navigate to the search page. From there a user can type in their address and a list of local study groups is displayed. The user selects a group they would be interested in joining and they are given contact information for who to reach out to in order to join.

### Task 3: Learning to pronounce English phrases

After joining a study group, users can meet at a physical location to review test materials together. Being in a group allows them to practice pronunciation of phrases with each other.

### Task 5: Finding a local testing facility

Like finding local study groups, when a user enters their location they will be shown the nearest USCIS office along with contact details and hours of operation for the facility. Additionally, within their study group they can share information about the local facilities.



### **Task 1: Learning names of local elected officials**

Similar to finding testing facilities, when a user enters their location they will also be provided with information about the current representatives in their area. Being a part of a local study group also helps in ensuring that every participant has the same elected officials and everyone can review the same answers.

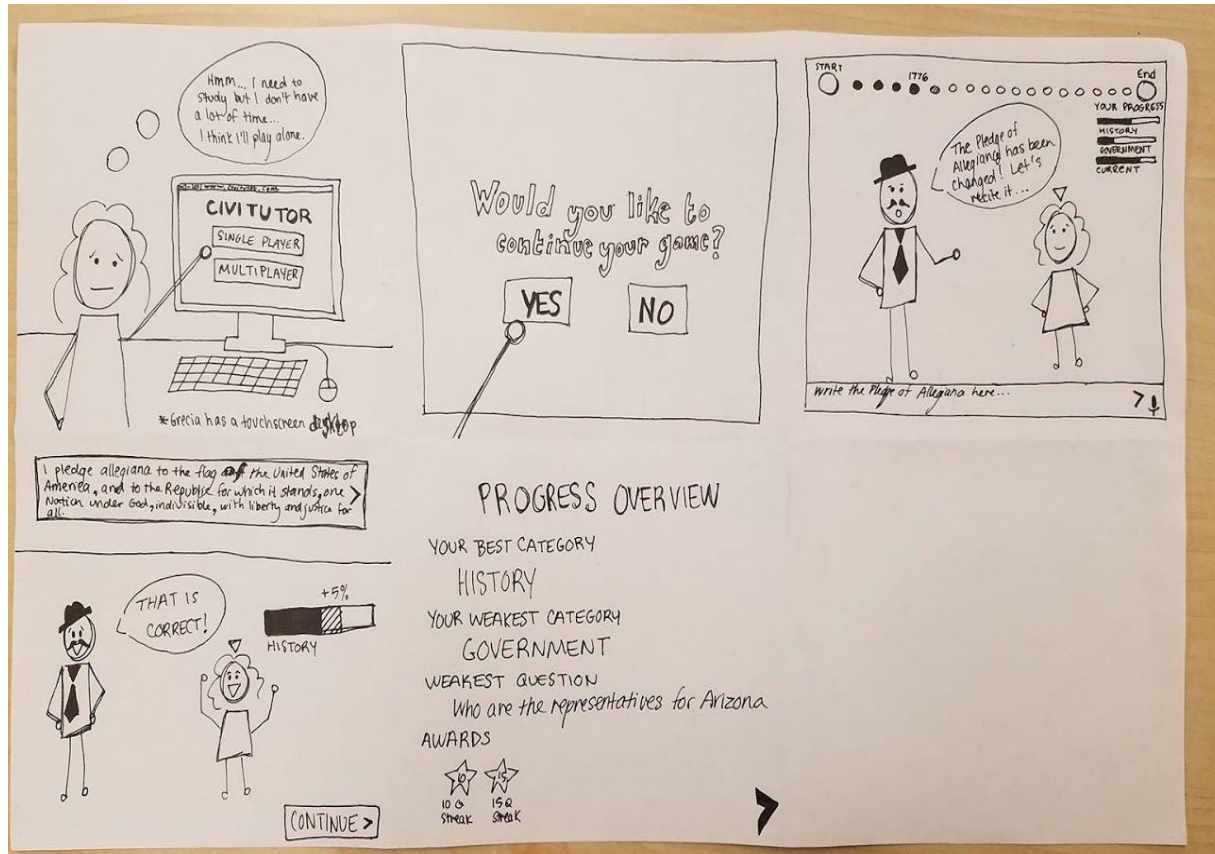
## **Written Scenarios**

**Practicing Questions Individually:** Hector comes home from work. He grabs a beer and sits in front of his computer, to get ready for a study session. He opens up CiviTutor in his web browser and logs into his account. He chooses to continue his progress in the single player mode. He is presented with a new screen with a timeline at the top, he notices he is about a quarter of the way through. A scene starts playing out in the center of the screen, with people signing the Declaration of Independence. At the bottom, there is the question asking “What year was the Declaration of Independence signed?” and a textbox. Hector types in “1776” and presses enter. “Correct! Good Job!” pops up on the screen before fading into the next scene. He continues doing this for another hour before calling it a day and logging out.

**Studying in a Group:** Gracia arrives at the community center on Tuesday night to meet with her study group for the Civics Test. She brings her laptop so that she can log in to CiviTutor for everyone to practice together. Once everyone arrives, she signs-in to her account and selects the multiplayer option which then prompts if she is practicing online or locally. She selects the local option and lets the other people in her study group add themselves to the CiviTutor study session. Now that everything is setup they begin practicing. CiviTutor finds that most of the group members are struggling more with American Government questions and sorts the practice questions to focus on this subject more. Gracia is randomly selected by the web application to answer a question first. She is prompted with the question of naming one right only for United States citizens. She does not remember the answer to the question and asks her group members what they know about the question. After some discussion the group concludes that one suitable response is freedom of speech. The application responds that the answer is incorrect and explains the distinction between the rights of everyone living in the United States and the rights of just United States citizens. This pattern continues with different members of the group answering and discussing questions for another 90 minutes before deciding that is enough practice for the night. Gracia selects the option to end the study session and the updated progress bars of each group member is displayed on her screen for everyone to see where they need more improvement.

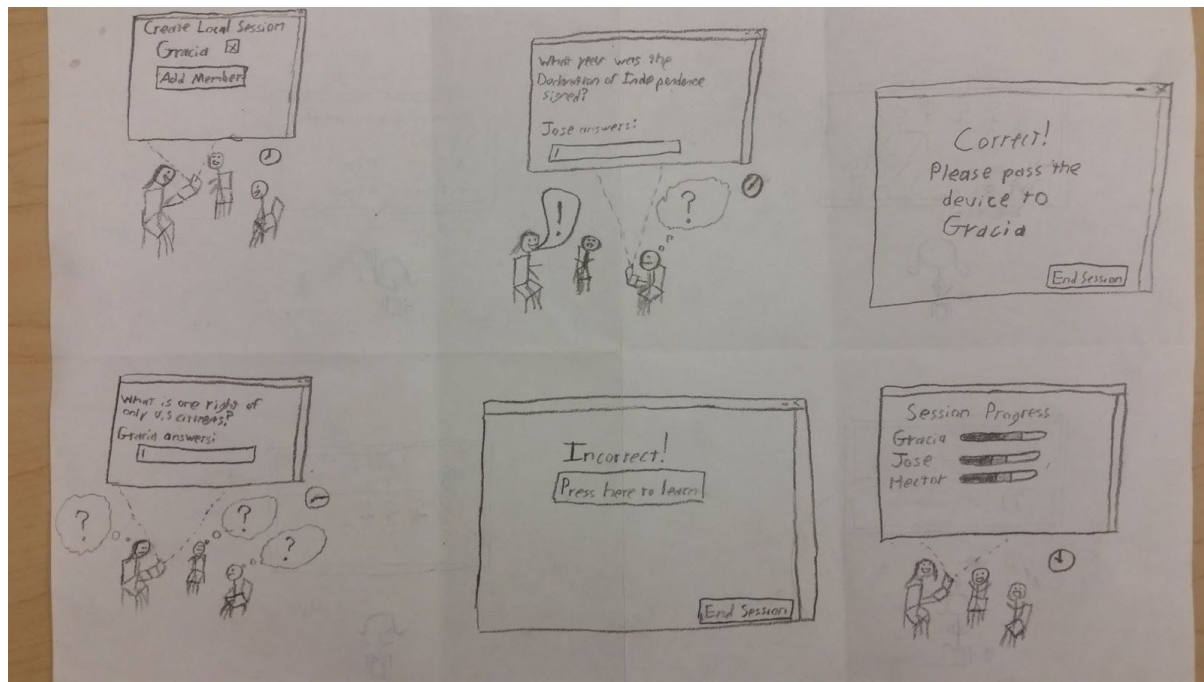
# Storyboards of the Selected Design

## Practice Questions Individually



Practice sessions are gamified to create a sense of progression that encourages more practice and returning to retain information.

## Studying in a Group



The web application better facilitates practice during group study sessions by rotating questions around members of the group but encouraging discussion to help each other learn answers to parts they do not know.