

Immersive Search Project

TEAM MEMBERS:

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Stage 5 : Evaluate

Client: Jason Broughton and Jennifer McLaughlin of LexisNexis

Participants

Number of participants: 6

We chose an extra participant in case a participant backed/dropped out at the last moment.

Characteristics of the 6 selected participants are as follows:

Participant 1:

- **Gender:** Male
- **Profession:** Student
- **Experience with UX:** Yes
- **Experience with Law:** Yes
- **Experience using AR/VR:** Yes
- **Experience with AR**(as a short description): Games like Pokemon Go
- **Preference of using AR/VR for work(scale of 1 to 5):** 4

Participant 2:

- **Gender:** Female
- **Profession:** Student
- **Experience with UX:** Yes
- **Experience with Law:** No
- **Experience using AR/VR:** Yes
- **Experience with AR**(as a short description): Have used it for gaming
- **Preference of using AR/VR for work(scale of 1 to 5):** 4

Participant 3:

- **Gender:** Male
- **Profession:** Professional
- **Experience with UX:** No
- **Experience with Law:** Yes
- **Experience using AR/VR:** No
- **Experience with AR**(as a short description): N/A
- **Preference of using AR/VR for work(scale of 1 to 5):** 3

Participant 4:

- **Gender:** Female
- **Profession:**n Student
- **Experience with UX:** Yes
- **Experience with Law:** Yes
- **Experience using AR/VR:** Yes
- **Experience with AR**(as a short description): Built an app that worked on augmented reality, use Snapchat filters,
- **Preference of using AR/VR for work(scale of 1 to 5):** 4

Participant 5:

- **Gender:** Male
- **Profession:** Other (Business)
- **Experience with UX:** No
- **Experience with Law:** No
- **Experience using AR/VR:** No
- **Experience with AR**(as a short description): N/A
- **Preference of using AR/VR for work(scale of 1 to 5):** 3

Participant 6:

- **Gender:** Female
- **Profession:** Other(Teacher)
- **Experience with UX:** No
- **Experience with Law:** No
- **Experience using AR/VR:** No
- **Experience with AR**(as a short description): N/A
- **Preference of using AR/VR for work(scale of 1 to 5):** 4

List of characteristics:

Required Characteristics	Neutral characteristics	Unwanted characteristics
<ul style="list-style-type: none">• Interest in VR/AR• Interest in law	<ul style="list-style-type: none">• Experience with VR/AR• Experience with law	<ul style="list-style-type: none">• Bias in Gender ratio• Bias in ages• Lack of interest

Recruiting :

We used Google Forms for the participant screening. A Google Form survey was used so that we could have different types of participants for the interview.

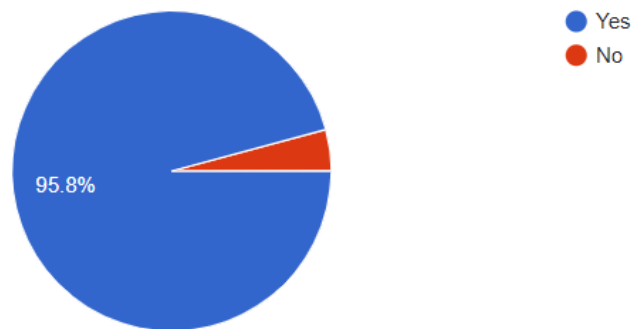
Survey link :

https://docs.google.com/forms/d/e/1FAIpQLSfO_NRbM7SPXDlro5zm7QlgcPkkwjlSysq0Fc0xa6AcTPW_xA/viewform?usp=sf_link

Results :

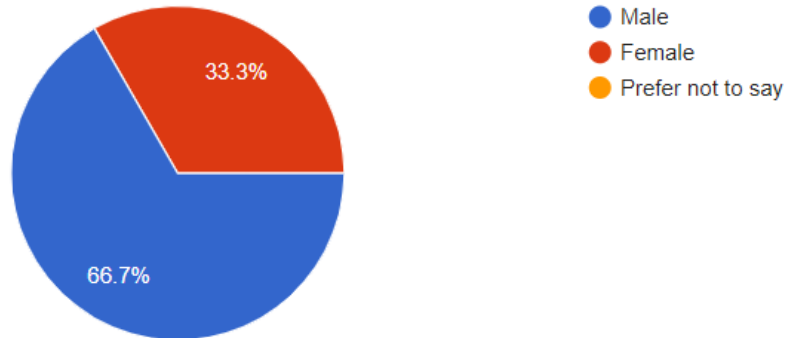
For the purpose of our project, could we use your details like gender,profession,etc? (Details such as Name,Email ID,Phone,etc will not be shared)

24 responses



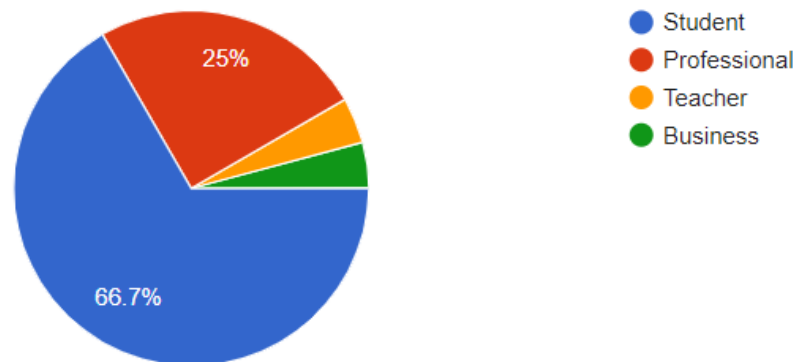
Gender

24 responses



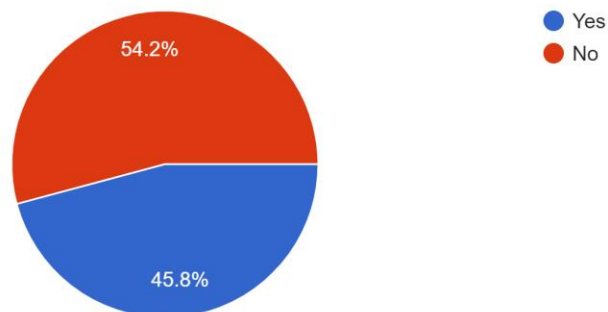
Profession

24 responses



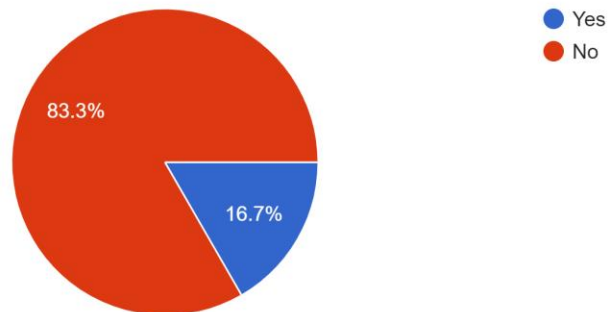
Do you have any experience with User Experience(UX)?

24 responses



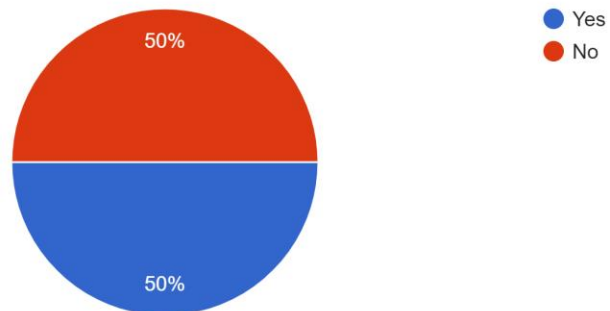
Do you have any experience with Law ?

24 responses



Do you have any experience using Augmented Reality(AR)/Virtual Reality(VR)?

24 responses



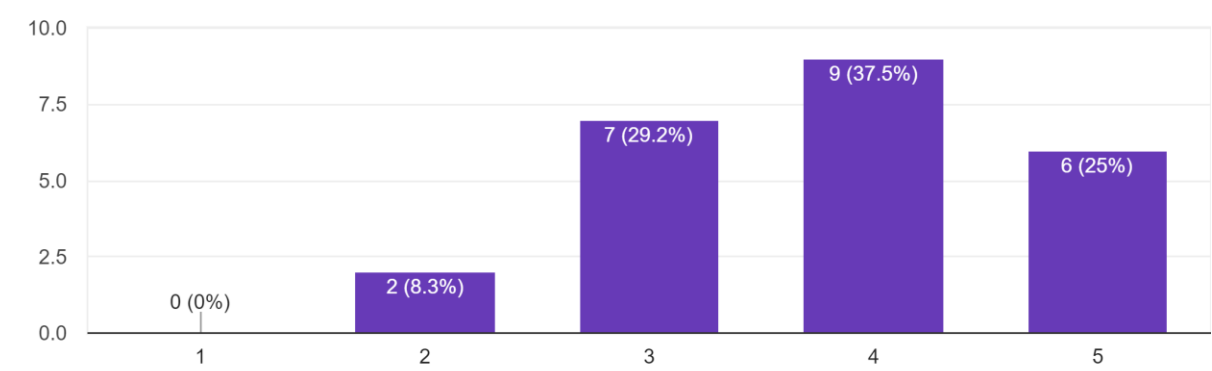
If yes, describe your experience in short

9 responses

Have used it for gaming
None
Games like Pokemon Go.
Used the AR/VR set sold by Amazon. Also used AR on google to see animals in our home
For gaming
Game, AR and VR developer
Built an app that worked on augmented reality, use Snapchat filters,
good technology and can be applied in many business models
Adventurous

Would you prefer using AR/VR for work?

24 responses

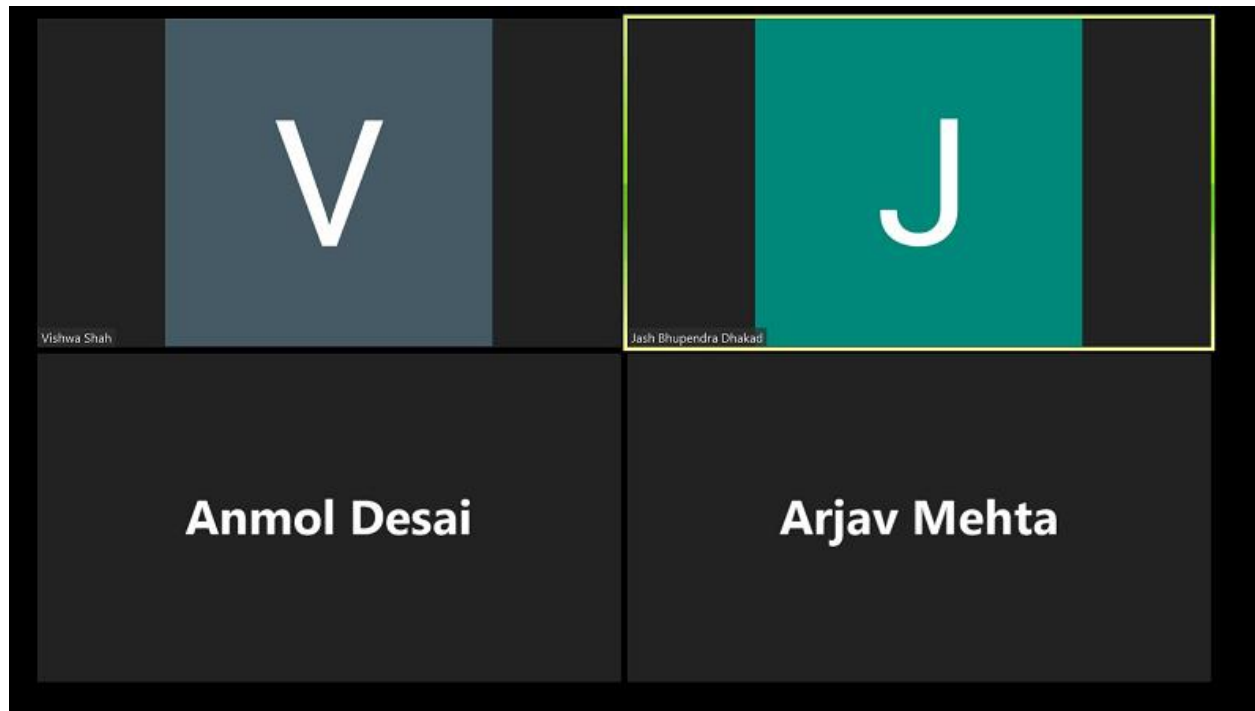


Selection

We wanted participants who were familiar with either UX or Law and would be able to interview on such a short notice. We did not have a hard preference on the age group hence we did not include that question in our survey form. But we did want a balance in the ratio of the profession and the gender of the selected participants. For this, we circulated this form to a wide audience to recruit people from different walks of life.

Lab

Setup



Tools

Tool	Purpose
Google Form	To perform the initial screening survey of candidates
Google Docs	For the documentation of the interview questionnaire and script
Zoom	To conduct the interview
Google Sheets	To record the answers and to create our final grid

All the interviews were conducted remotely and considering the time zone constraints and the discomfort the participants could face, we only had upto 3 people from our group for each interview.

Interviews

Script

Hello,

My name is ___. I sincerely appreciate you taking time out for this interview. How're you doing today?
<waits for answer>

Great! So I will begin by giving a brief introduction of our team and our project. We are Computer Science Graduate Students from NC State University and have been working on a User Experience Project – 'Immersive Search' with LexisNexis. Our project is essentially a tool that could help make the legal search process more immersive and increase its ease. We have aimed to achieve this by employing Virtual Reality. Given that lawyers have vast data to access that could help them with their cases, using such a tool could help users, lawyers here, to access relevant data efficiently and gain insights from the data making the process deeply engaging and less cumbersome for the lawyers.

So this was a bird view of our project, do you have any questions? <pauses for answer>

Great! Now firstly, I want you to know that this is not your evaluation but the evaluation of our prototype. Your response will help us better ourselves and thus we request you to be completely candid with your answers. Also, please feel free to ask any questions you have throughout the interview. In addition to this, if at any time during the interview you wish to stop the meeting, feel free to tell us and we would abide by it. Given that this is our first prototype some things may not work out, we regret the same and request you to bear with us. As for the interview, we would begin by asking you some introductory questions which would give you an idea about the use case of our product and then present to you our prototype and ask some questions regarding the same.

Do you have any questions? <pauses for answer>

Before we start, do you have an objection with us recording this conversation? This recording would be kept confidential and would only serve as a way to better evaluate ourselves. <pauses for answer>

Great! So let us begin!

1. When searching for relevant books or documents in a library or through web search results, do you face any issues?
2. Would you prefer enhancement in your current document search process in terms of ease of search and be comfortable adapting to this change?

Great, thank you! We will now show you the prototype that we have created. As seen in our previous questions, our prototype is related to searching and easing the process of it through inclusion of Virtual Reality. You could say that we are augmenting the benefits of web interface search and a traditional library into one. We will now show you the prototype that we have created. We request you to be candid and think out loud while you evaluate our prototype.

Shall we begin?

Great, so here is a video of our prototype!

So, as you must have guessed, this is a first person view, that is you are viewing exactly what a user would view. It begins from the user (you) entering the library, searching using the voice assistant feature, making notes, seeing a summary of your notes, performing functionalities of starring and saving search results documents.

How did you like our prototype?

Do you think our prototype is aesthetically appealing and easy to use?

Can you identify the need of 'mini library' from the prototype?

Could you tell us a few things that you disliked in our prototype?

Do you think our prototype could potentially solve any of the issues you mentioned above?

Would you prefer using this tool for your work and can you think of any additions that could be made to the prototype?

Did you notice sticky notes and a text summary wall? What do you think that is for?

Do you have any questions regarding the prototype? Do you find anything confusing about the same?

Great! Thank you for your responses. That was surely helpful.

Grid

The grid contains the notes taken by the interviewers in the interview.
It can be accessed by the following link:

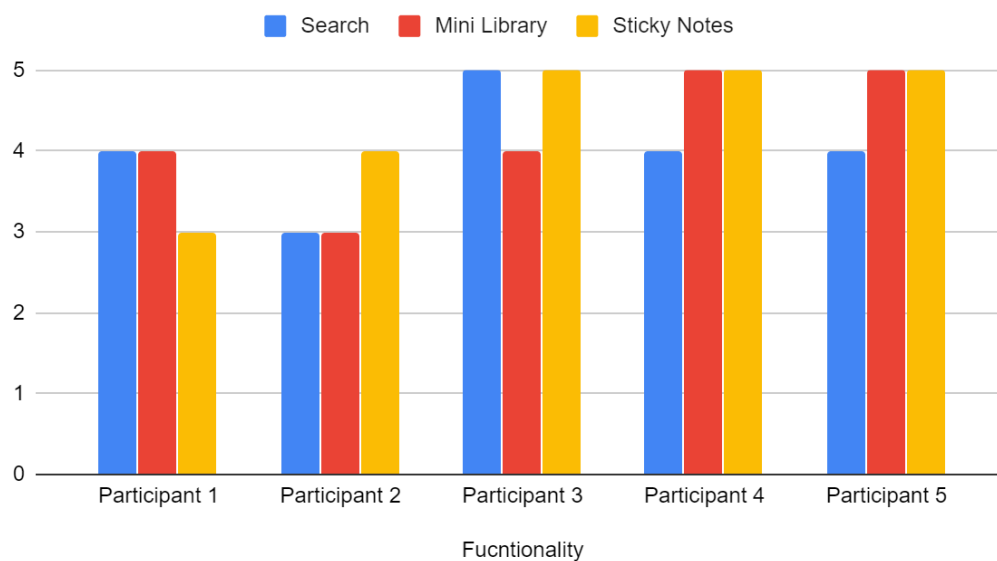
https://docs.google.com/spreadsheets/d/147Gvpm6_En3J5TRcJhFsgOalyZl6zFEleCsiG0Nxeek/edit?ts=5eb11433#gid=1482501223

Results

Patterns found

- Users get started quickly when they use the prototype for the first time.
- Most users are satisfied with the search result and surprised to see they can modify the results after.
- Users found the tool/prototype easy to use but had higher expectations from the aesthetics.
- Most users found navigating a bit cumbersome. They had a hard time to navigate to a certain page/location they wanted to go. Most of them just go through each page to find it.
- All our interviewees could locate all of our features - Search, Mini Library, Sticky Notes.
- Users could certainly see the prototype solving the problems they initially would've faced with searching.
- Users like the "sticky notes wall" idea, they think it's really helpful for them to organize their ideas and notes. And it's the part that users spend most of their time interacting with during the demo
- The following graph shows the participant ratings for individual functionalities - Search, Mini Library, and Sticky Notes:

Participant Rating



Follow up

- Make the prototype more appealing by increasing it's aesthetic values.
- At the entry of the library, show users what they can do and how they can navigate in the library.
- Add a minimap to show the user where they are and where they could go to the next step. And allow the user to teleport to whichever scene they like to goto.