#lexisvirtualcourtroom

CSC 591 - Spring 2022

Stage 4 – Prototype Date: April 24, 2022

Team: Anurata Prabha Hridi, Aditya Ravikant Jadhav, Khawar Latif Khan, Saurabh

Nanda, Hossein Saedi, Leanne Serrao

Clients: Brent Homan, Cindy McCracken, Jason Broughton (LexisNexis)

Tools

We used Figma to create the prototype of our design.

<u>Vectary</u> (a 3D design plugin for Figma), <u>The Noun Project</u> were used to gather images and icons needed for the prototype, and <u>Motion</u> (an animation plugin for Figma) to create the animated GIFs.

Roles

We divided the tasks and assigned the roles as follows.

Team Member	Role
Anurata Prabha Hridi	Maker
Aditya Ravikant Jadhav	Maker
Khawar Latif Khan	Writer
Saurabh Nanda	Stitcher
Hossein Saedi	Asset Collector
Leanne Serrao	Maker

Prototype

The interactive prototype can be accessed at this link: https://bit.ly/ev-dash.

Building on the storyboard created in <u>Stage 3 (Choose)</u>, the prototype was designed to be used during the hearing and deliberation phases. The evidence dashboard was designed to provide a detailed view of the artifacts presented as evidence. This was achieved by giving the jurors access to various controls such as rotational angle, brightness, and size. The key features of this prototype are as follows.

Evidence viewing panel

The evidence viewing panel is the most prominent section of the dashboard. When a piece of evidence is presented to the jury, it can be viewed in detail using this panel on the screen. This panel covers more than half of the screen to allow for better viewing. The number or label of the artifact is presented at the bottom of the screen.



Timer

Another significant element in the evidence viewing panel is the timer. Whenever a piece of evidence is presented to the jurors, there is a time limit associated with it. This means that the jurors cannot view it indefinitely to ensure that the hearing can move further. The timer on the screen indicates how much time is left for the jurors to view this piece of evidence.

Control panel

The evidence dashboard contains a control panel at the bottom which the jurors can use to examine the evidence. The panel includes buttons or touchpoints that can be used to perform the following modifications on the artifact.

- Up (↑) and down (↓) arrows for vertical rotation.
- Left (←) and right (→) arrows for horizontal rotation.
- Plus (+) and minus (-) signs to zoom in and zoom out, respectively.
- Image logo to apply the background of the crime scene and view the evidence in context.



Expert notes

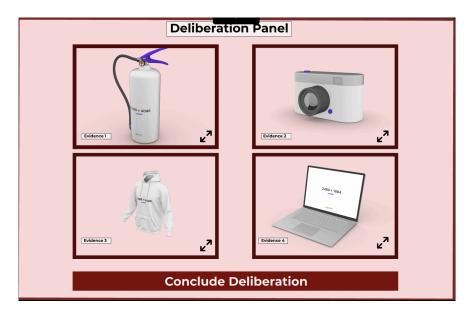
The right column of the evidence dashboard is dedicated to expert notes. This section, similar to the control panel, is always present when the jurors are examining the evidence. The details in this section, including technical details about the evidence and any additional

information, add to the understanding of the jurors. The "Deliberation phase" button will only be active once the hearing has concluded. This is something that the moderator(s) will control.



Deliberation panel

Once all the pieces of evidence have been examined, and the hearing phase of the trial has concluded, the jury then moves to the deliberation phase. This is where the deliberation panel of the evidence dashboard is launched.



The deliberation panel includes all the pieces of evidence together, serving as a repository of every artifact presented during the trial. The jurors can select a single piece of evidence and view it in detail, similar to the hearing phase. The "Deliberation phase" button is to be used to go back to the deliberation panel with all the pieces of evidence.

Once the deliberation has completed, and the jury has reached its verdict, they can click on the "Conclude Deliberation" button and exit the evidence dashboard.

Trials

We conducted two trial sessions to make sure that the prototype was working as expected. The findings of the trials are discussed below.

Trial 1

The first trial ran into some problems regarding navigation and the need to add some more screens.

- The up (\uparrow) and down (\downarrow) arrows for vertical rotation were not working when the artifact was already rotated at a horizontal angle.
 - We fixed this issue by connecting the screens and making these arrows responsive to interaction.
- There was no indication for the users about the limits of zooming in and out.
 - We added maximum and minimum zoom screens to indicate these limits.
- There was no connection between the hearing and deliberation phases. These
 appeared to be two different segments of the overall process.
 - We created a screen to show that the time for viewing the evidence has run out. We used this screen as a bridge between the hearing and deliberation phases.
- In the deliberation panel, there was no visible cue for the jurors to show that they could view individual pieces of evidence.
 - We added the "full screen" or "enlarge" icon with each piece of evidence to show that the evidence can be viewed on full screen.
- From the deliberation panel, there was no proper conclusion for the dashboard itself.
 - We added an end screen to show that the evidence dashboard has now served its purpose.

Trial 2

We ran a second trial to go over the changes and review the prototype again.

- There was no option to move to the deliberation phase from any screen while viewing the evidence.
 - We added a button on all screens, taking the jurors to the deliberation phase.
 This button will only be active once the hearing has ended.
- It appeared that the loading time for the first screen was lesser and not enough to read the content displayed.
 - After reviewing all the details, we concluded that this is because of the slowness of the UI screen or the platform itself.