



# Access Illinois

Usage Guide

## An Overview of Access Illinois

### Purpose

Prior to its inception, accessibility maps were still present at the University of Illinois. However, they require more steps than are reasonably expected when a user is operating with one hand, such as a wheelchair user or someone with a cane. Access Illinois is here to solve those problems.

However, by the nature of the webapp, one need not have a disability to benefit. Myriad users can benefit through the means we've built into the app. In this way, we're laying the foundation for [inclusive](#) and [universal](#) design.



one arm



arm injury



new parent

Access Illinois integrates existing UIUC [accessibility maps](#) with [Google Maps](#), allowing the user to discover walking directions to their destination, then see the accessible entrances, classrooms, restrooms, and more.

Note: In Version 1, only the first floor is shown due to programming constraints. This is slated to be improved. In addition, Version 1 targets those with physical disabilities only – features for screen readers etc. are yet to be installed.

In addition to providing these crucial mapping services, the webapp also allows for the input of custom tour routes. In the beta, there is a route that leads from the Illini Union, in the first group of buildings to be made accessible, to the [Disability Resources and Educational Services](#) (DRES) building on Oak Street. Along the route, users are able to see pins that offer unique facts and historical tidbits regarding disability at Illinois – one of the major contributors to what we consider accessibility nationwide today.

### How Is It Made?

Access Illinois was made in conjunction with the [Chancellor's Committee on Access and Accommodation](#), DRES, and UIUC Facilities and Services. Primarily, it was built using the [Google Maps API](#), which allowed for both the map overlays and tour functionality. [Google My Maps](#) allowed for the generation of a [KML](#) file which feeds the tour.

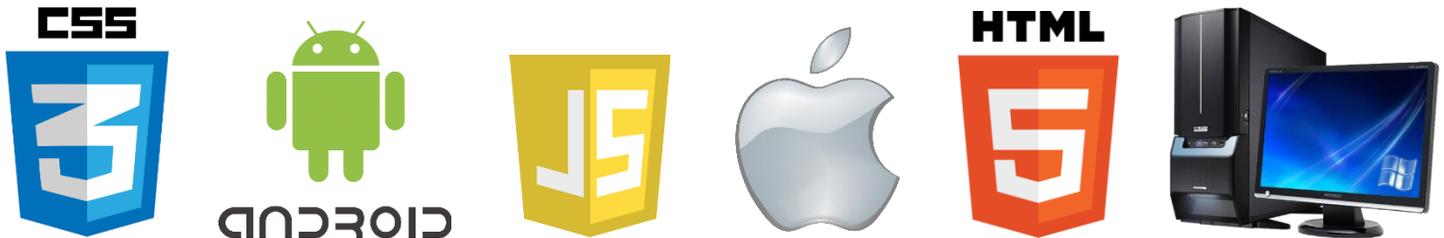


Created during [HackCulture](#) 2017, sponsored by the [University of Illinois Library](#).

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).



Finally, the website was built using a combination of modern web coding and design practices, including [HTML5](#), [CSS3](#), and [JavaScript](#). This allows for maximum flexibility, extensibility, accessibility, and efficiency. In addition, the webapp will work across all modern operating systems.



Note: Unfortunately, we cannot alter much of Google Maps as that is programmed and designed by Google, and as such cannot guarantee its accessibility. That being said, we have made strides to ensure our website conforms with [WCAG AA](#) guidelines.

### Next Steps

Next steps for the development of Access Illinois include addressing the issue of multiple floors on a given building. In addition, we are aiming to refine the website and include accommodations for a wider range of disability types. This includes, but is not limited to:

1. Including proper ARIA roles and modifications to allow screen reader access.
2. Diving in depth to the Google Maps API to determine if and how overlaid images can be made accessible to agents such as VoiceOver.

Created during [HackCulture](#) 2017, sponsored by the [University of Illinois Library](#).

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

## Developers



*Figure 1: Mark McCarthy*



*Figure 2: Matt Arensdorf*



*Figure 3: Emily Chen*

Mark is a graduate student studying Information Architecture with the School of Information Sciences. He's our lead web designer and debugger. He also took care of accessible programming.

Matt is undergraduate studying Computer Science, aiming to go into animation and design. He's our lead web developer, and handled much of the JavaScript work and embedding the map. He also handled fine tuning the latitude and longitude (by hand!) for each of the accessibility map overlays.

Emily is a PhD student studying Computational Linguistics and Computer Science. Our lead researcher and tester, Emily provided invaluable info by creating the tour and pin functionality of our maps, as well as providing troubleshooting and technical support to the team.

Report compiled by Mark McCarthy, April 30, 2017.

Created during [HackCulture](#) 2017, sponsored by the [University of Illinois Library](#).

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).