

The Merits of Philanthropy and Why You Should Give Us the Last 30%

As a freshman, have you ever found yourself lost on campus, unsure of how to get to your next class? Have you found yourself late for lessons, trying to decide whether walking or taking the unpredictable shuttle bus is faster? With the myriad of corridors on campus, how do you know which is the fastest walking route?

Getting around campus is a challenge for those unfamiliar with the area. With the switch to online lessons, most students rarely come to campus, and some freshmen may have never set foot on the campus, as their orientations are also online. When these students do come to school, they find themselves lost and can't figure out how to get to their destination. This is made worse by the recent amendments to the shuttle bus route, which added, removed or rerouted many shuttle bus services.

Students currently turn to navigation apps (e.g. Google Maps) to figure out how to get to their destination. However, these apps have many limitations. They will only recommend walking routes along driving roads, ignoring the many shortcuts around NUS. Furthermore, they are unable to recommend travelling by shuttle bus. To figure out shuttle bus routes, students can refer to maps posted at bus stops or the NextBus app, but these solutions inherently lack navigation capabilities and get confusing if the journey requires switching services midway.

Right now, there is simply no easy or convenient way to navigate around the campus. There isn't a solution that can tell students which shuttle buses to take to get to their destination, there isn't a way to get optimal walking routes, and there isn't a way to compare between walking and taking shuttle buses.

This is where our app, WhereTo?, comes in. In essence, it is a navigation app that serves the NUS Kent Ridge campus, recommending both shuttle bus routes and walking routes for users to get to their destination.

Routing

WhereTo?'s routing capabilities are central to its functionality, and we are able to offer features that are unavailable elsewhere.

By mapping out the Kent Ridge campus in great detail, we are able to recommend walking routes that utilize the many shortcuts and corridors in NUS, giving users a truly

optimal route. For instance, the walking route recommended by Google Maps to get from S2 to COM2 takes 25 minutes, by taking a big loop that passes by YIH, Central Library and Ventus. However, it is much quicker to cut through the center of campus, passing by the Temasek Life Science Laboratory. Our app is able to find this route, and it only takes 7 minutes.

WhereTo? also recommends routes that utilize the shuttle bus service, which is something that you won't find anywhere else. By encoding shuttle bus routes into our database as well as collecting data on shuttle bus travelling times, we are able to find optimal routes that make use of the shuttle bus. Our app is also able to handle transfers between different shuttle bus services.

With the unique ability to recommend both walking and shuttle bus routes, we also allow users to make a quick decision on whether to walk or take the shuttle bus by comparing estimated travel times.

User Considerations

In order to make our app intuitive to use, we have provided the same core navigation features as Google Maps, including route plotting, trip directions, estimated travel time, as well as support for various modes of transport (walking-only and shuttle bus). Users can also see a live marker of their current location on the map, so they can easily follow our recommended route.

We have a host of other features that make the navigation experience a breeze for users. Users are able to favourite certain locations, so they are able to conveniently select them as the starting point/destination of the trip, similar to how Google Maps allows you to store your Home and Work locations.

Furthermore, we store users' recent trips, so users can simply choose from their recent trips if they are making the same journey. This feature works offline, so even if an internet connection is unavailable, users can get directions for their 10 most recent journeys. Our app is also customizable, allowing users to adjust their walking speed to provide more accurate travel time estimates. Users with different walking speeds may have different optimal routes, even when their starting point and destination are the same.

Does WhereTo? sound cool to you? Try it out [here!](#)