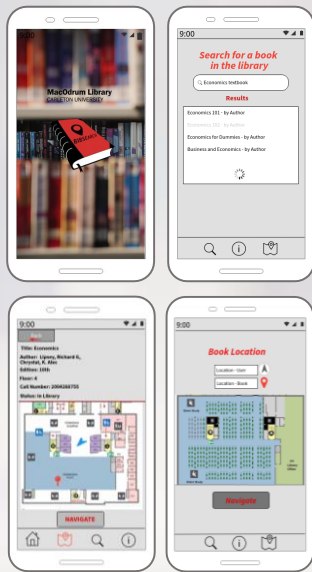




# BibSearch

## Modern library navigation

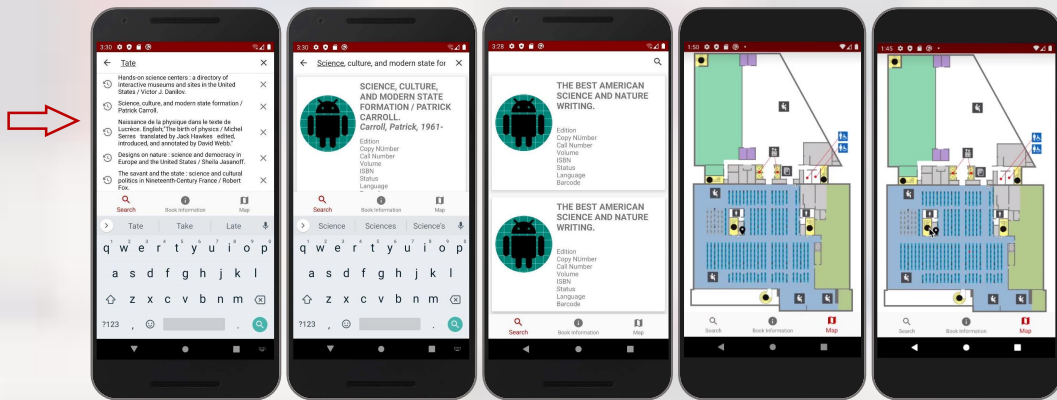
### INITIAL DESIGN APP INTERFACE



### PROBLEM STATEMENT

*"A proof-of-concept for a library navigation application"*

### SCREENSHOTS OF THE APP

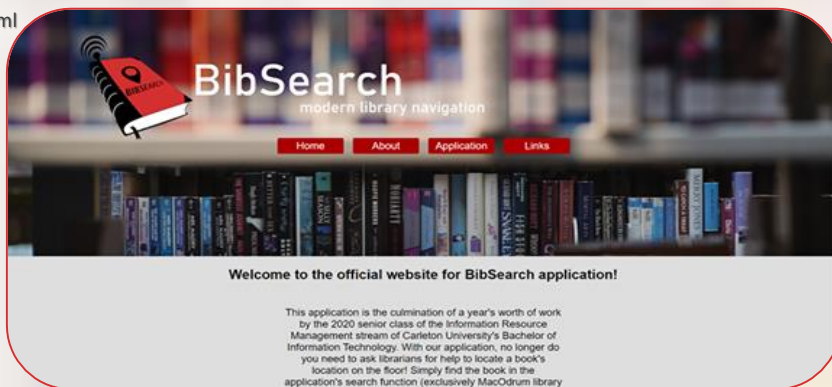


### COMPARATIVE ANALYSIS

| ArcGIS                                                                                                                                                                                                                                                                                                                                       | NavApp                                                                                                                                                                                                                                                                                                                                          | Minrva                                                                                                                                                                                                                                                      | LibCompass                                                                                                                                                                                                                                                                                                                                         | InMapz                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| App available for many users                                                                                                                                                                                                                                                                                                                 | App available <u>only</u> For Oklahoma University.                                                                                                                                                                                                                                                                                              | App available for many universities,                                                                                                                                                                                                                        | App available <u>only</u> for City University of Hong Kong                                                                                                                                                                                                                                                                                         | App available for all users                                                                                                                                                                                                                                                                                                                             |
| Navigates within Shelf Bay                                                                                                                                                                                                                                                                                                                   | Navigates within Shelf Bay                                                                                                                                                                                                                                                                                                                      | specific bay & shelf number                                                                                                                                                                                                                                 | Navigates within Shelf Bay                                                                                                                                                                                                                                                                                                                         | Gives details about the searched item                                                                                                                                                                                                                                                                                                                   |
|     |     |    |     |     |

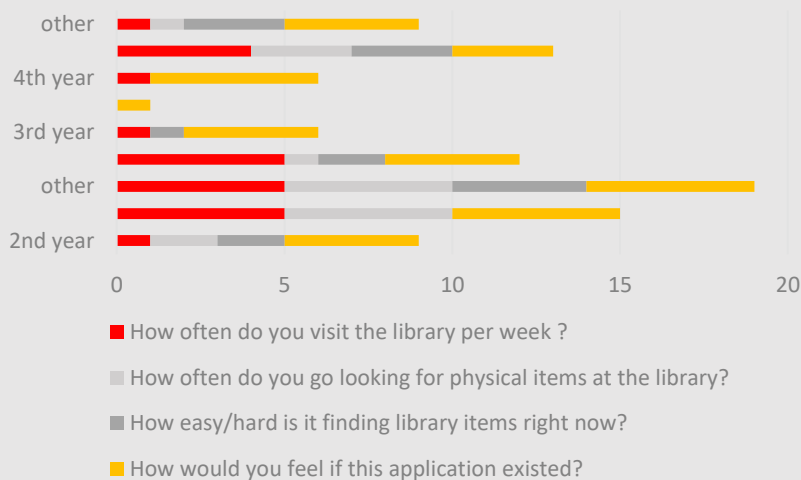
### WEBSITE SCREENSHOT

[bibsearch.github.io/index.html](https://bibsearch.github.io/index.html)

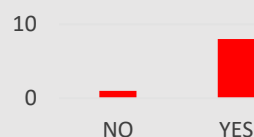


### UX /SURVEY RESULTS

#### UX analysis



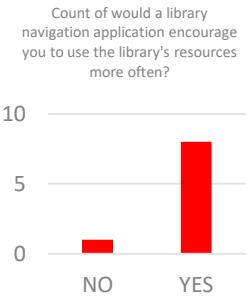
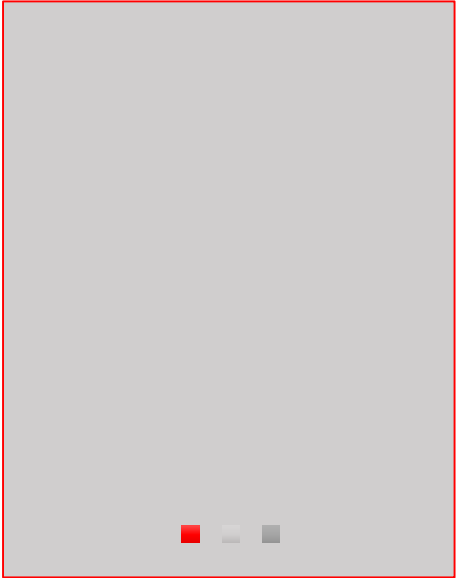
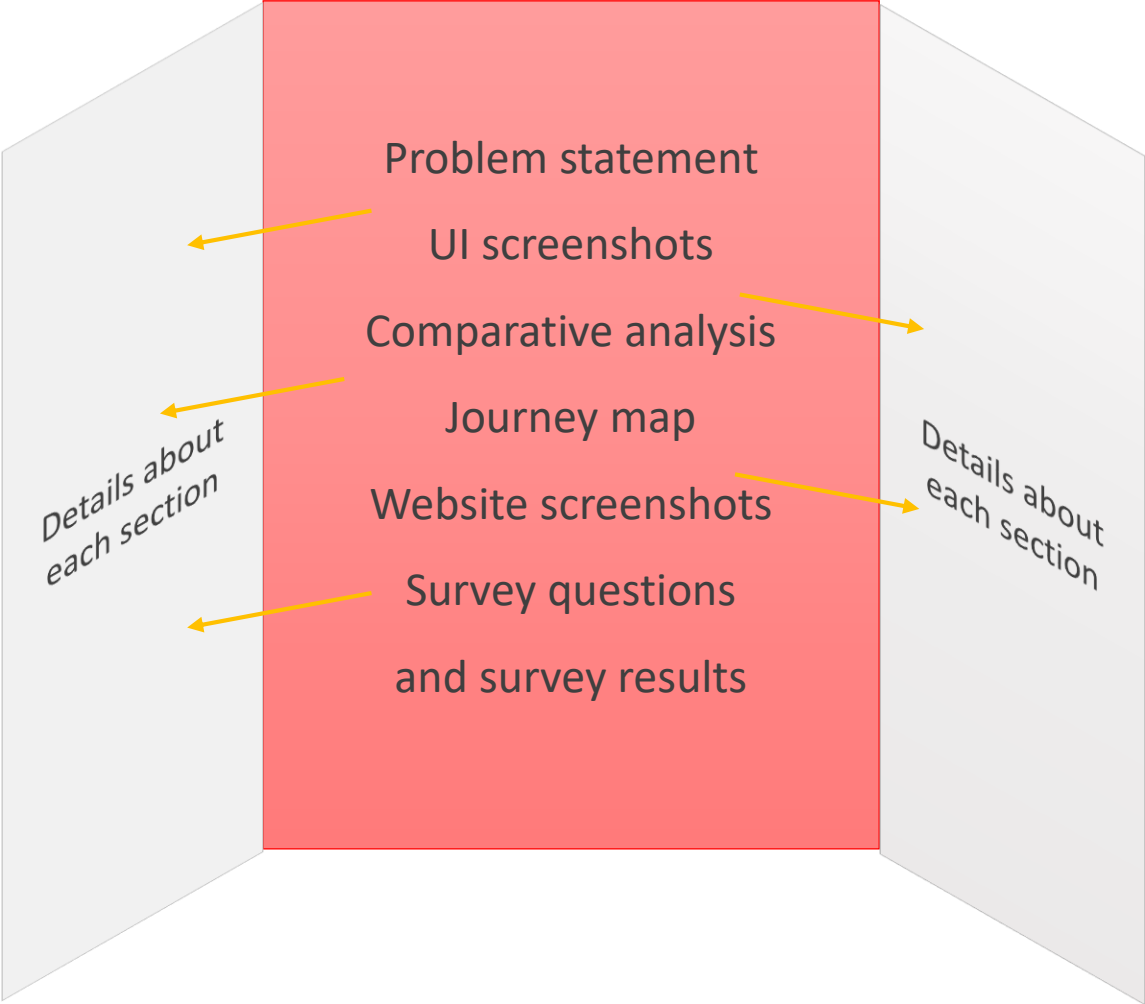
would a library navigation application encourage you to use the library's resources...

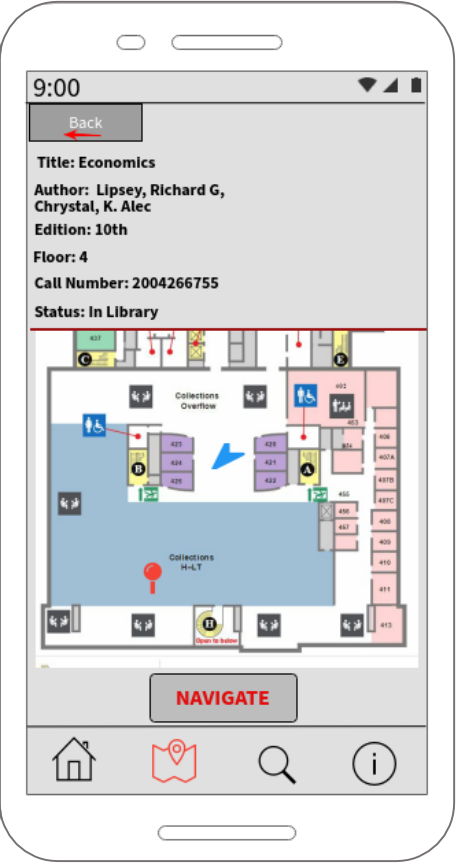
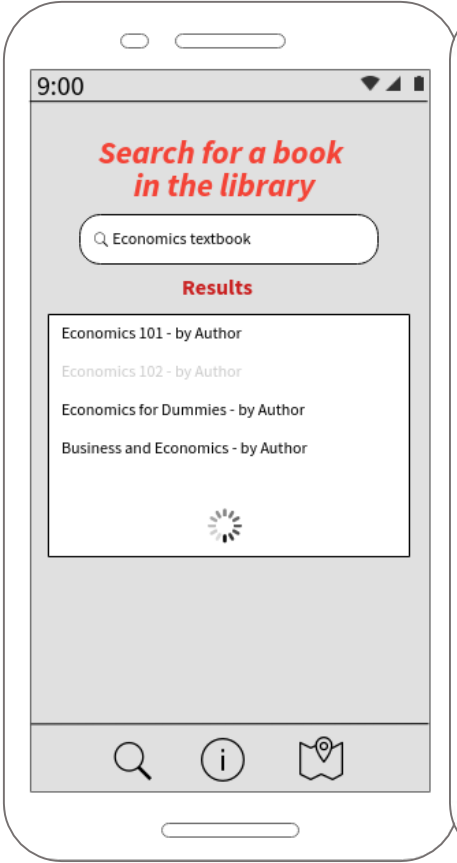
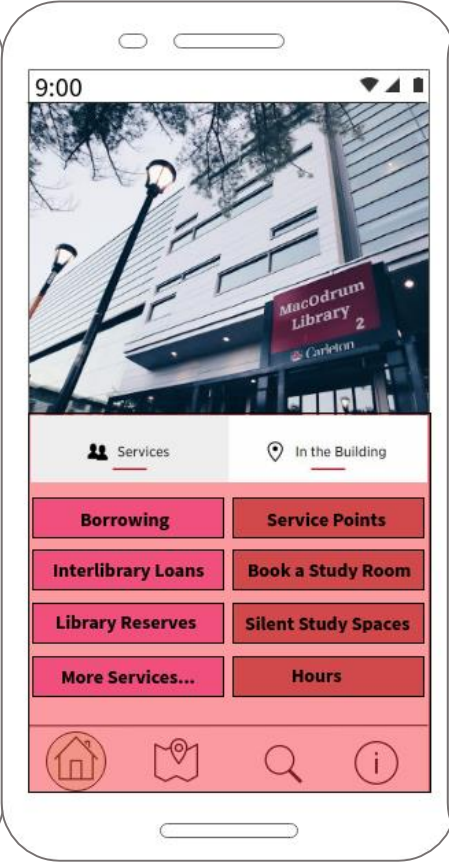
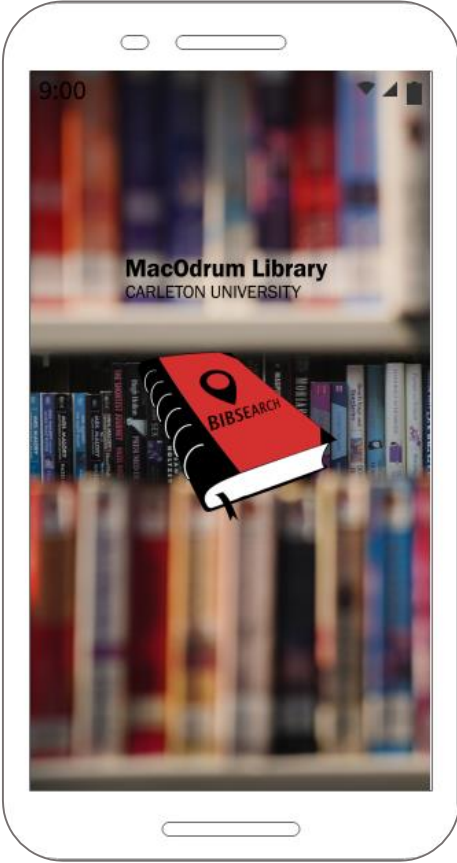


#### Team members

Alex Loupova, Ishani Saha Roy,  
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Vincent Bugler  
Supervisor:  
Omair Shafiq  
BIT-IRM Carleton University

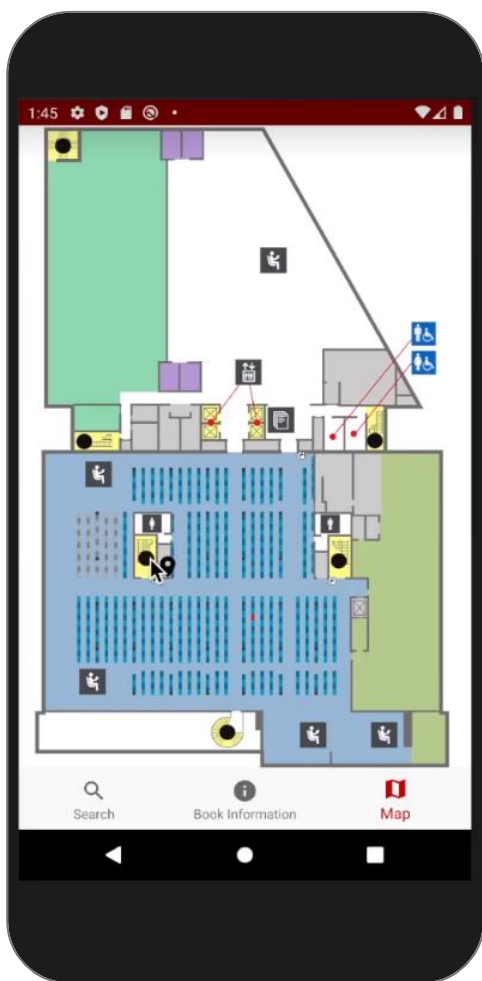
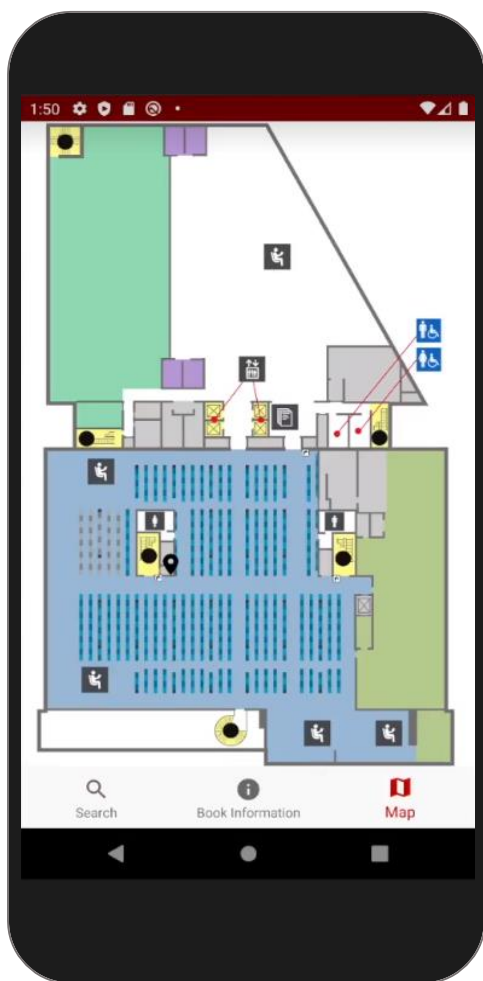
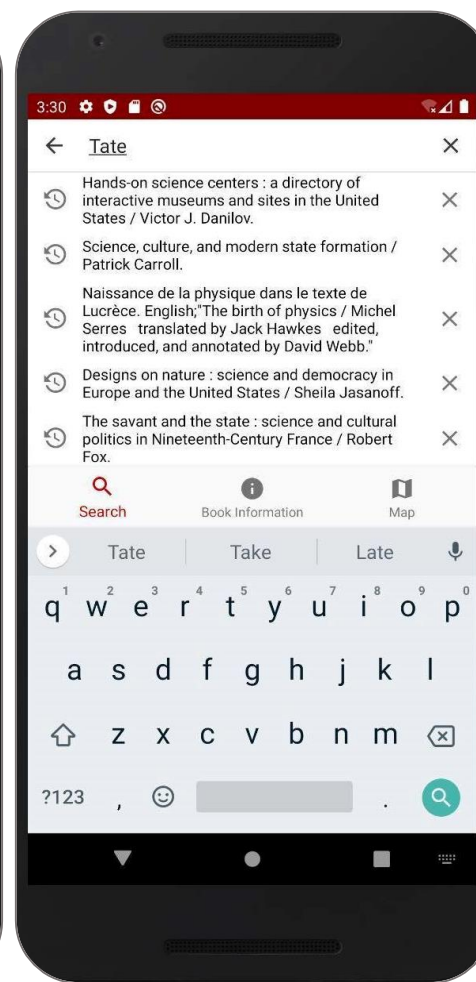
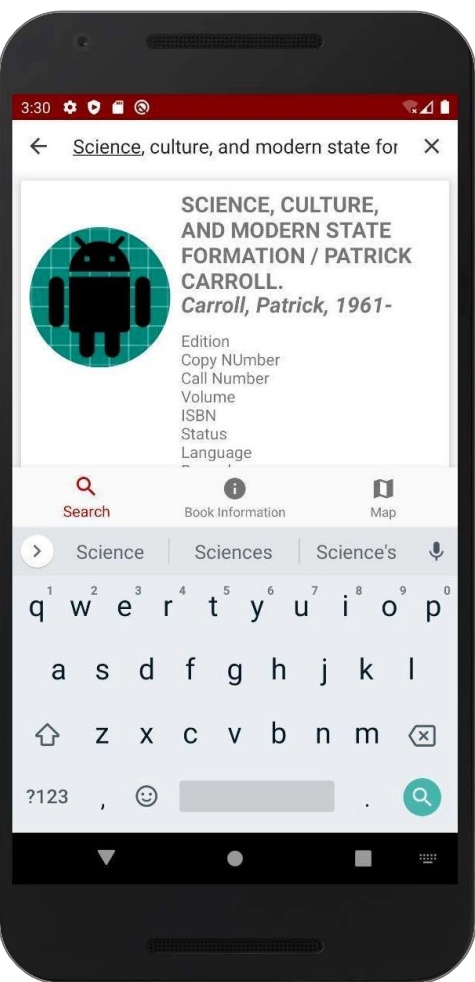
# POSTER DRAFT





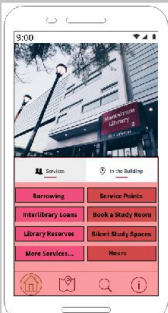
|                                                       | BookMark                                                                                                                                | NavApp                                                                                                                                                         | Minrva                                                                                                                                                    | ArcGIS                                                                                                       | LibCompass                                                      | InMapz                                                                                                                           |  |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|
| Case study or application?                            | Both                                                                                                                                    | Application                                                                                                                                                    | Application                                                                                                                                               | Application                                                                                                  | Application                                                     | Application                                                                                                                      |  |
| OS                                                    | Android                                                                                                                                 | Android, iOS                                                                                                                                                   | Android                                                                                                                                                   | Android, iOS                                                                                                 | Android, iOS                                                    | Android, iOS                                                                                                                     |  |
| Technology used                                       | Phone camera (to scan barcode)                                                                                                          | Bluetooth beacons & Wi-Fi (where available)                                                                                                                    | Bluetooth beacons                                                                                                                                         | Wi-Fi and Bluetooth                                                                                          | Bluetooth beacons & Wi-Fi (where available)                     | Location access & Wi-Fi (where available)                                                                                        |  |
| Available for use?                                    | App available only for Swansea University                                                                                               | App available only for University of Oklahoma                                                                                                                  | App available for many universities, location services limited                                                                                            | App available for many users                                                                                 | App available only for City University of Hong Kong             | App available for all users                                                                                                      |  |
| Free to use?                                          | Yes                                                                                                                                     | Yes                                                                                                                                                            | Yes with paid subscription options                                                                                                                        | Available for \$0 but not all the features are available. A subscription fee is required for other features. | Yes                                                             | Yes                                                                                                                              |  |
| Infrastructure/equipment costs                        | None                                                                                                                                    | Aruba Bluetooth beacons<br>Meridian software                                                                                                                   | Bluetooth beacons                                                                                                                                         | None                                                                                                         | Bluetooth beacons                                               | None                                                                                                                             |  |
| Precision of navigation                               | Within shelf bay                                                                                                                        | ~1m                                                                                                                                                            | Bluetooth location averages ~1m precision                                                                                                                 | Within shelf bay                                                                                             | Within shelf bay                                                | Gives many details about the searched item                                                                                       |  |
| Can it guide patrons to specific book/bay of shelves? | Yes; bay                                                                                                                                | Unclear (but likely yes)                                                                                                                                       | Yes; specific bay & shelf number                                                                                                                          | Yes; shelf                                                                                                   | Shelf                                                           | No                                                                                                                               |  |
| Features                                              | Static navigation (not real-time)<br>Ability for library staff to update shelves<br>Navigates multiple floors<br>Built-in feedback form | Real-time navigation<br>Service points<br>POIs<br>Information about events<br>Proximity push notifications<br>Link to digital resources<br>Stronger with Wi-Fi | Real time navigation overtop of an up to date map of the facility<br>Functions for multiple different facilities<br>"Popular near me" books are displayed | Real time navigation with precise indoor location positioning system.<br>Ability to make your own maps       | Real-time navigation to shelves, service points, and equipment. | Displays things like restrooms, food, ATM, Security, escalator. details about stores such as hours and deals are also available. |  |






# Latest News!

This area can contain version or patch notes to keep people in the know if we make any changes to the app.



|                                                       | BookMark                                                                                                                                | NavApp                                                                                                                                                         | Minrva                                                                                                                                                    | ArcGIS                                                                                                       | LibCompass                                                      | InMapz                                                                                                                           |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Case study or application?                            | Both                                                                                                                                    | Application                                                                                                                                                    | Application                                                                                                                                               | Application                                                                                                  | Application                                                     | Application                                                                                                                      |
| OS                                                    | Android                                                                                                                                 | Android, iOS                                                                                                                                                   | Android                                                                                                                                                   | Android, iOS                                                                                                 | Android, iOS                                                    | Android, iOS                                                                                                                     |
| Technology used                                       | Phone camera (to scan barcode)                                                                                                          | Bluetooth beacons & Wi-Fi (where available)                                                                                                                    | Bluetooth beacons                                                                                                                                         | Wi-Fi and Bluetooth                                                                                          | Bluetooth beacons & Wi-Fi (where available)                     | Location access & Wi-Fi (where available)                                                                                        |
| Available for use?                                    | App available only for Swansea University                                                                                               | App available only for University of Oklahoma                                                                                                                  | App available for many universities, location services limited                                                                                            | App available for many users                                                                                 | App available only for City University of Hong Kong             | App available for all users                                                                                                      |
| Free to use?                                          | Yes                                                                                                                                     | Yes                                                                                                                                                            | Yes with paid subscription options                                                                                                                        | Available for \$0 but not all the features are available. A subscription fee is required for other features. | Yes                                                             | Yes                                                                                                                              |
| Infrastructure/equipment costs                        | None                                                                                                                                    | Aruba Bluetooth beacons<br>Meridian software                                                                                                                   | Bluetooth beacons                                                                                                                                         | None                                                                                                         | Bluetooth beacons                                               | None                                                                                                                             |
| Precision of navigation                               | Within shelf bay                                                                                                                        | ~1m                                                                                                                                                            | Bluetooth location averages ~1m precision                                                                                                                 | Within shelf bay                                                                                             | Within shelf bay                                                | Gives many details about the searched item                                                                                       |
| Can it guide patrons to specific book/bay of shelves? | Yes; bay                                                                                                                                | Unclear (but likely yes)                                                                                                                                       | Yes; specific bay & shelf number                                                                                                                          | Yes; shelf                                                                                                   | Shelf                                                           | No                                                                                                                               |
| Features                                              | Static navigation (not real-time)<br>Ability for library staff to update shelves<br>Navigates multiple floors<br>Built-in feedback form | Real-time navigation<br>Service points<br>POIs<br>Information about events<br>Proximity push notifications<br>Link to digital resources<br>Stronger with Wi-Fi | Real time navigation overtop of an up to date map of the facility<br>Functions for multiple different facilities<br>"Popular near me" books are displayed | Real time navigation with precise indoor location positioning system.<br>Ability to make your own maps       | Real-time navigation to shelves, service points, and equipment. | Displays things like restrooms, food, ATM, Security, escalator. details about stores such as hours and deals are also available. |

## BookMark

- Uses phone camera. 
- App available only For Swansea University.
- Navigates within Shelf Bay
- Features:



- Static navigation (not real-time)



- Ability for library staff to update shelves



- Navigates multiple floors
- Built-in feedback form

## NavApp

- Uses phone camera.
- App available only For Oklahoma University.
- Navigates within Shelf Bay
- Features: Real-time navigation  
Service points  
POIs  
Information about events  
Proximity push notifications  
Link to digital resources  
Stronger with Wi-Fi



Available for :