

MAPPING A LIBRARY

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INTRODUCTION

As a part of work on USQ Library's mobile services strategy we identified a service where a map of the catalogue could be highlighted showing where a specific book was located.

One of the early issues with library access is ease of finding information. Whilst those familiar with parts of the catalogue might know where to look to find a book quickly, with different collections it can be confusing to find the resource that the user is seeking. The 'Show on Map' function effectively informs the user the location of the selected resource.

Planning

The Process can be split up into four main steps.

- Gathering data about the library in a format usable for mapping
- Processing this information into a database for easy searching
- Creating a map of the shelves and collections

• Combine a search interface with the map to highlight the correct bay

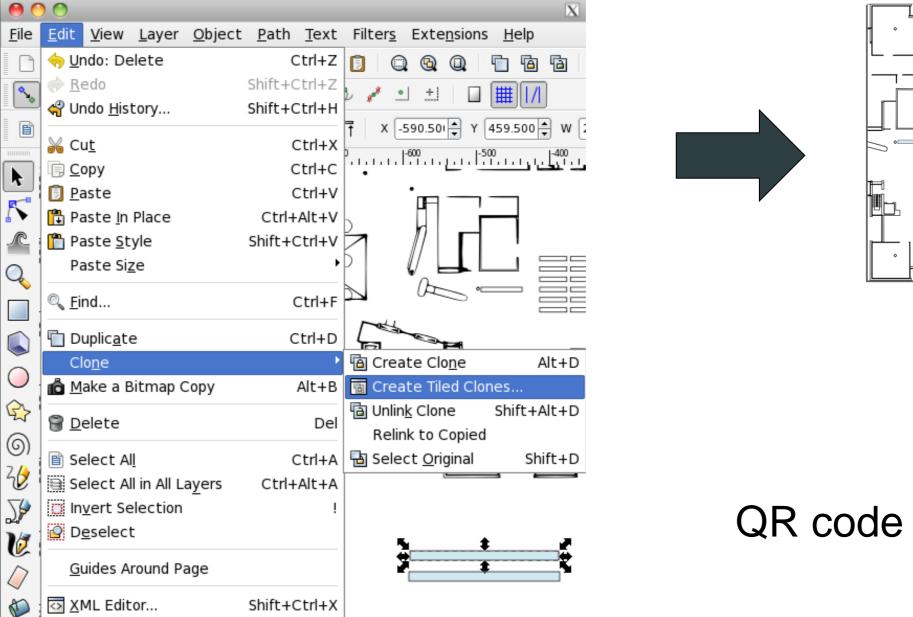
Process

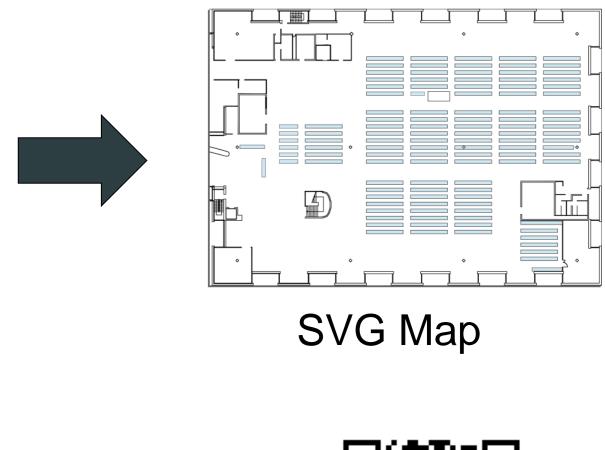
Data Collection:

- Record the location of shelves onto the existing floor plan of the library.
- Shelf grouping and collection locations identified and labelled on the plan.
- Uniquely allocate each bay and identify both sides in a catalogue.
- The Dewey decimal records were recorded against the bay number.
- Information acquired from existing records verified with the numbered bays.
- Data to provide: Bay, Side Shelf-Start, Row-End, Row-Start, Shelf-End
- Saved as csv file format for ease of importing data.

Data Processing:

• Data exported in csv format to be used to create table within database.







Create map with Inkscape

Show on Map Image: S

- Import the information into a database using new table and nominated fields.
- Validate data and methods for maintaining updated information.

Map creation:

- Using existing floor plans imported into AutoCAD, Inkscape or similar.
- Using Inkscape to convert BMP to SVG map of floor plan.
- Objects created to represent a shelf layout with unique ID set for each bay.
- This ID can then be selected using the document getElementByID() function
- With the exception of IE major browsers support SVG rendering natively.
- As the primary target was the iPhone using Safari, SVG was chosen.
- The use of SVG and vector graphics in general means that it is easy to update the bay locations and map in a simple manner using the bay ID and the linked database.

Search Interface:

- The last stage of the project is to build the search interface.
- Links the database of bays and call numbers with the svg map.
- Searching on a book results in a call number or Dewey decimal which can be used to indicate the bay number where the book should be held.
- The resulting bay is then highlighted on the map indicating the book location.



Simply search for the book and select "Show on Map".



CONCLUSION

The USQ Toowoomba Campus library is fortunate in that the collection is located on a single level thus simplifying the mapping process as it means a single map can be used to represent the entire set of Toowoomba collections. Future development can display more resource detail on the map with further expansion to cover all campuses.



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