Maps is a tourist map with an integrated RFID chip, enabling customized, personalized information to be displayed at kiosks around a city, site, or museum. Because the RFID chip is integrated inside the map itself, or other document, the user doesn’t need to be aware of the details of the technology, only the actions that are possible. Not only does the Map provide useful information to the tourist, such as recommendations on places to visit, it provides useful data to the city or tourism organization, such as patterns of sites tourists visit.

This system could also be used in a museum, with RFID readers in each exhibit or near certain artifacts, helping to provide valuable and useful information to museum curators.

Maps can be used in multiple contexts, ranging from citywide to within a particular cultural heritage institution. Visitors use Maps to get personalized recommendations of places to go or exhibits to see, as well as for the fun of unlocking badges. Because the RFID tag is embedded in the tourist map itself, they don’t need to think about carrying another thing with them all the time. Cities and institutions get valuable data on patterns of where people go. Currently, data on how many people are in a particular place is collected, but there is no way to know where people go after they leave that place. Do they go to another cultural heritage site? Do they leave the city? Because each Map has a unique ID, a data visualization and analytics system can be created to help visualize patterns, because we can know which places a person went to in what order. This can help us to see if there are any interesting patterns, such as a high percentage of people going from a particular museum to another particular museum. This information can be used to help the city plan things such as public transportation routes, parking, public safety, and advertising and marketing for places not getting as high traffic as they want. With just data about how many people are at each location, it is difficult to determine whether or not you really need a bus route between two highly trafficked locations.

CONCEPT

USER EXPERIENCE

TECHNOLOGIES

• RFID
• Arduino
• Python
• MySQL
• HTML
• CSS
• Javascript
• PHP