Overview
In order to teach children about the uses of RFID technology, we developed a programmable web application for Discovery Space employees to create and manage games associating RFID tags with various toys and media.

Objectives
• Create an exhibit to teach children about RFID technology
• Implement unique game modes that interest and gamify the learning experience for children
• Provide an administrative interface that allows Discovery Space employees to create and manage games as well as track membership metrics

Approach
• Discussed project goals with sponsor and converged on design layout
• Determined that writing a web application using Flask provided us with the best set of tools to accomplish our objectives
• Converged on application layout and database structure
• Designed game modes that gamify the experience of teaching children
• Presented Statement of Work to sponsor for approval
• Purchased materials, began project development and Design Specification Report
• Cycled through project design, development, and debug
• Completed prototype and presented to sponsor
• Refactored prototype from sponsor feedback and presented to Discovery Space Museum
• Refactored design from Discovery Space feedback and discussed future implementation
• Documented project development, completed final report, and presented final product to sponsor

Outcomes
The Discovery Space Museum was provided with an exhibit that can be used to teach children about the uses of RFID technology. They also gained the following:
• Exhibit that is intuitive for children and easily managed by employees
• Exhibit with dynamically changing games
• Application for tracking membership metrics
• Template for future exhibits that are software applications
• RFID tags and scanners that can be utilized anywhere in the museum