

Department of Software Engineering
Building 70-1690
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Senior Project Proposal
UNDERGRADUATE

Project Title:	Museum Experience Survey
Organization:	Lockheed Martin
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(Instructions for completing this proposal can be found at

<http://www.se.rit.edu/~se561/CourseInformation/ProposalInstructions.pdf>

Background Information

Lockheed Martin is highly engaged with Science, Technology, Engineering and Math (STEM) activities across the nation and is seeking additional ways to educate children and promote careers in STEM-related fields. As such, Lockheed Martin has a number of volunteer members involved with The Discovery Center of the Southern Tier, a non-profit museum, where Lockheed Martin has sponsored the addition of a number of new exhibits highlighting engineering. In an effort to provide continuous exhibit improvement, the Discovery Center is interested in creating a method of tracking user engagement and feedback on the exhibits.

Project Description

The purpose of this project is to create an electronic system that will provide data and statistics on user exhibit engagement for a museum. The system should use technology to minimize the amount of manual recording that is currently done to gather feedback from museum visitors.

The complete set of data to be gathered shall be defined by the end-customer during project team kickoff, but should contain a minimum of the following information:

- Basic Demographic Information (Zip Code, # Children, Ages, # Visits, etc.)
- Exhibit Voting (i.e. 1-5 scale, possibly multiple areas to rate)
- General Comments / Feedback

Additionally, the Museum Experience Survey (MES) shall integrate with any existing user tracking systems, where applicable (i.e. user mailing list). The system will run on a closed wireless network. An internet connection should not be assumed available.

Project Scope

The Museum Experience Survey (MES) Software shall capture a minimum of the following information:

- Basic demographic info (zip code, # kids, ages, first visit?)
- Exhibit Voting (i.e. 1-5 scale, possibly multiple areas to rate)
- General Comments / Feedback

The system shall have a user Kiosk at the front desk.

The MES shall be accessible via any Smart Phone.

The MES shall be easy and quick to use at any exhibit.

The MES shall utilize available technology to quickly and accurately select the exhibit to be scored, either through QR code or other applicable means.

The MES server application shall run on a Windows 7 or higher PC.

The MES server application shall integrate with any existing applications, such as mailing list management, etc.

Project Challenges

Interoperability with iOS and Android.

Constraints & Assumptions

Users will use their personal Smart Phone / Smart Device for this system, so it should be compatible with both iOS and Android.

Sponsor-Provided Hardware and Software

Server PC and Operating System

Project Search Keywords

n/a

Department of Software Engineering Required Deliverables

1. Project website holding all work products and project artifacts maintained in the project account on the se.rit.edu web server.
2. Project plan, schedule and process methodology definition prepared by the end of week 3 of the first term.
3. Tracking report for time/effort worked on the project, and at least two other product/process metrics appropriate to the project and development methodology. Tracking reports updated on the project website at least every two weeks.
4. Interim status and final project presentations

5. Project poster and presentation at “SE Senior Project Day”
6. Project technical report

Sponsor and Project Specific Deliverables

User Guide

Technical Guide (installation, setup, etc)

Proprietary Information

None

Project Agreements and Assignment of Rights

RIT policy gives students full ownership of any work done as part of coursework which includes their work on senior project. As the sponsor of a course project, you can select one of three approaches for dealing with ownership of project artifacts and intellectual property, and the disclosure of proprietary information. If you seek assignment of rights, the individual team members will sign a project agreement based on the rights that you want.

If you are requesting that the team assign project rights to you, please get any corporate and legal clearances that you feel are needed to use the **unmodified** project agreement, before submitting your project proposal. Indicate that this has been done with an **X** in the left box below.

X	<p style="text-align: center;">Corporate and Legal Clearance of Project Agreement</p> <p>This project will either be an Open Source Project not requiring assignment of rights, or we have the necessary approvals to use the unmodified project agreement. (Note: The project agreements are cleared for RIT internal projects.)</p>
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Select one of the following approaches for assignment of the project artifacts and intellectual property, and the disclosure of proprietary information by placing an **X** in the box to the left of the appropriate paragraph below.

<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<p style="text-align: center;">Assignment of Full Rights</p> <p>If a team is assigned to this project, all students on the team will sign a standard Student Course Project Intellectual Property and Non-Disclosure Agreement. This agreement assigns the rights to the team’s project work to the sponsor, and describes the process whereby the project sponsor can reveal proprietary information to the team. For non-RIT projects, the faculty coach will sign a standard Faculty Course Project Non-Disclosure Agreement which describes the same process for revealing proprietary information.</p>
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<p style="text-align: center;">Assignment of Limited Use Rights</p> <p>If a team is assigned to this project, all students on the team will sign a standard Student Course Project Limited Use and Non-Disclosure Agreement. This agreement assigns the sponsor rights to the team’s project work for internal or non-commercial use by the sponsor. The sponsor may maintain and extend the project but not transfer it</p>

	to a third party or use it in a commercial product. The project team will retain patent and commercialization rights. The agreement also describes the process whereby the project sponsor can reveal proprietary information to the team. For non-RIT projects, the faculty coach will sign a standard Faculty Course Project Non-Disclosure Agreement which describes the same process for revealing proprietary information.
<u>X</u>	<p style="text-align: center;">Open Source Project</p> <p>If a team is assigned to this project, the team will develop this as an open source project and will publish all artifacts via an open source mechanism agreed upon through discussions with the project sponsor. The sponsor will gain access to project artifacts only through this open source repository. No rights need to be assigned exclusively to the project sponsor, and there will be no transfer of proprietary information.</p>

The agreements and policies can be found at:

- Student Course Project Intellectual Property and Non-Disclosure Agreement
<http://www.se.rit.edu/~se561/CourseInformation/StudentCourseProjectAgreement.doc>
- Student Course Project Limited Use and Non-Disclosure Agreement
<http://www.se.rit.edu/~se561/CourseInformation/StudentCourseProjectLimitedAgreement.doc>
- Faculty Course Project Non-Disclosure Agreement
<http://www.se.rit.edu/~se561/CourseInformation/FacultyCourseProjectAgreement.doc>
- RIT Intellectual Property Policy C3.0. The project agreements are consistent with section C3.0(5)(B)(2)
<http://www.rit.edu/academicaffairs/policiesmanual/sectionC/C3.html>