Introduction

This document describes the usability test plan for my individual usability testing assignment working with the Michigan Tech Formula SAE Enterprise. The purpose of this usability evaluation is to create a central location for important information on our new file sharing site. The issue I plan to combat with these instructions specifically is accessing and using the SharePoint site for the team. By creating an instruction set, the team will always have documentation for the site, even after I have left Michigan Tech. This plan includes the following sections:

- Project Purpose and User Requirements
- Design Usability Goals
- Purpose of the Usability Evaluation
- Concerns to be Addressed During Testing
- Target Audience
- Detailed Audience
- Background
- Design of the Usability Test
- and Assumptions

Project Purpose and User Requirements

The purpose of the SharePoint documentation I will create is to serve as an aid in the login process for members of the Formula SAE Enterprise. This document should serve as a guide for students enrolled in the class who have never used SharePoint as well as members who just need a refresher or if they are using a new computer. The document includes both images (screenshots) and text (verbatim from previous emails I have sent to the team), both of which are based on a lesson in presented during one of our meetings. This will allow both visual and auditory learners to access the information easily. I have spoken to the advisor for the class, James DeClerck, and we decided that having this documentation on both the SharePoint site for reference after login and on the classes Canvas site for reference prior to login would be most effective.

Either place that the document is hosted, it will be in a PDF form and not editable. The document will be posted in the same manner on the Canvas site as it will be on the SharePoint site, however, it will be a different place allowing users to access it from multiple locations and in multiple ways.

In order to use this document, users will need to be enrolled in the enterprise class because they will need access to the sites and there is no reason for them to try accessing them if they do not have a stake in the class.

Design Usability Goals

My main goal with this document was to make it flow together well. To complete the document with a flow that was acceptable, I made the steps included go in a logical order (ie, you have to login before you can check out a document.) To complete this task effectively, I needed to:

Create the text
Send the text to the team via e-mail
I met with the team leaders on March 26th to make sure that the document that they wanted was what I produced as a final product. I chose to meet with the leadership because they are the most invested members of my audience and they generally give the best feedback.

**Purpose of the Usability Evaluation**

The usability evaluation of the Michigan Tech Formula SAE Enterprise’s SharePoint instruction set will evaluate the potential for errors and difficulties involved in using the application for practicing necessary actions. Some of the areas that will be tested through the usability evaluation process were derived from a heuristic evaluation performed on my personal experiences with the Michigan Tech Formula SAE Enterprise’s SharePoint Site.

**Concerns to be Addressed During Testing**

I plan to address the usability issues through the use of questionnaires for both leadership members and general members during the class meeting session. Before I do that, however, I found some concerns during my heuristic evaluation that need to be addressed.

**Findings**

- There are many steps to logging on to the SharePoint site.
- Once a user is in the site, there are specific steps to accessing documents.
- Check out procedures are a big issue with the team now.
- The current document is in any electronic format, I will need to decide where to host this document since having logon instructions within the site wouldn’t make sense.
- Should I leave it in an editable format so that future users can change or update it or do I put it in PDF format?
- Since most engineers use PCs, is it ok to use a MAC for screenshots? Do I need to use a PC to make it look the same?

The questionnaires that I created for the testing of the Michigan Tech Formula SAE Enterprise SharePoint document are as follows:

**Demographics**

Leaders / General Members

1. What year is this for you at Michigan Tech?
2. What year is this for you on the Formula Team?
3. Why did you join the team?
4. What did you hope to gain from the enterprise experience?
5. Are there any accomplishments that you would like me to highlight?
6. What have you gained from your time on the team?
7. How have your experiences developed your skills for professional life?
8. Do you hold any other leadership positions on campus?
9. What would you like to do after graduation?
Some more specific questions to be addressed in this usability evaluation covering the final document will include:

**Questions About the Manual’s Usability:**

**Leaders / General Members**

1. Do the pictures help you remember the steps?
2. Have you tried doing this process before?
3. Do you think that this document will help you more in the future?
4. Is this what you expected when you heard about the document?
5. Do you understand the text that goes along with the image?
   a. If yes, does it help you recall steps that come next?

**Target Audience**

This project has a dual audience which needs to be considered during both our planning and testing stages. Our primary audience are new students enrolled in the Michigan Tech Formula SAE Enterprise Course as they will be using the SharePoint site for the first time and may need extra help. However, the more senior members of the class will also need to access the document as a refresher at the beginning of a semester or whatnot, making them a secondary audience for my project.

**Detailed Audience**

The following personas show the key characteristics of the end users that are considered to be critical differentiators for successful adoption, and use, of the Michigan Tech Formula SAE Enterprise SharePoint document. These characteristics are the basis for participant selection for the usability evaluation. The participants will be selected to reflect the range of characteristics shown below.

**Persona One – “Andrew”**

Age: 21
Involvement: Formula SAE Enterprise Member, Third Year at Tech

Andrew is a student at Michigan Technological University. He is involved in the Formula SAE Enterprise year round as well as holding a leadership role in the Society of Automotive Engineers. Andrew has been a part of the Formula SAE Enterprise since his first semester at Michigan Tech and he has always liked to work on cars. He has been on the team long enough to experience many changes. He has used the M-Drive and moved through the two and three year car plans. He is skeptical about working with the new SharePoint site since it is new and the M-Drive, in his opinion works just fine.

**Persona Two – “Katy”**

Age: 19
Involvement: Formula SAE Enterprise Member, Second Year at Tech

Katy is a student at Michigan Technological University. She is involved in the Formula SAE Enterprise but this is her first semester. She has not yet found her fit on campus and is hopeful about the possibility of being incorporated into the team dynamics. Katy likes to work on engines because of her experience working with her father restoring old muscle cars as a child. She has not been a member of the team long enough to
experience the M-Drive and as such has no qualms with the switch. Katy has experience with the SharePoint software from a previous job that required her to use it but she has no experience programming the site for specific actions.

Background
For my individual project, my client will be the Michigan Tech Formula SAE Enterprise. I am currently the budget and marketing manager for the team and I work with the budget, marketing, and web design for the team. This year, I created a SharePoint site for the team to host all the shared files necessary for team operation, grading, and collaboration. SharePoint makes it easier for people to work together by setting up websites to share information with others, manage documents from start to finish, and publish reports to help everyone make better decisions. SharePoint helps cut training and maintenance costs, saves time and effort, and focuses on higher priorities.

Since I have been involved with the team for the entire year, and I created this website, I did not have to ask for direction on what my client wanted since I am basically the client. I do, however, plan to meet with the team leaders, Dave DeGroat-Ives, Alisha Clark, Paul Demay, Tom Daavettila, Dallas Smolarek, as well as our faculty advisor, James DeClerck, to make sure the document is usable for the team.

The issue I plan to combat with these instructions is accessing and using the SharePoint site for the team. By creating an instruction set, the team will always have documentation for the site, even after I have left Michigan Tech.

Design of the Usability Test
A single usability test will be run in with 5-10 individual participant sessions. Each individual session will consist of a set of tasks and an interview/questionnaire for the participants to complete on the computer. These tests will take place in the Advanced Technology Development Center on Michigan Tech’s Campus as that is where we design, build, and test our car.

The individual evaluations will take place in the following order:
- A performance evaluation in which each participant is asked to perform a series of real-life tasks relating to the SharePoint site.
- A questionnaire and an interview for both leaders and general members will be used after each performance evaluation to gather additional insights from the participants about the Michigan Tech Formula SAE Enterprise SharePoint Document.

Assumptions
For this project, I have made some very basic assumptions about the users for my final document to aid me in the testing process, those assumptions are listed here: Both leaders and general members have accessed the SharePoint site once before. The participants have read the e-mail documentation that I have sent out regarding the SharePoint site. The participants have a vested interest in the Formula SAE team.
Finding the Site and Logging In

1. Open **Internet Explorer** on a PC or **Safari** on a MAC.
2. Go to **sharepoint.mtu.edu/fsae** (the "/fsae" is KEY in the site title).
3. A window will open within the browser allowing for you to type in your username and password. Use your MTU ISO-login and ISO-password. Below is an image of this box.

4. The website will open and it looks like the image below.

5. **Note:** when you are logging in from your personal or home computer, you will need to put “MTU" in from of your ISO-login.

Opening a Document
1. **Open the SharePoint Site**

2. **Using the left side navigation bar choose which type of document you would like to open.**

<table>
<thead>
<tr>
<th>Libraries</th>
<th>Site Pages</th>
<th>Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSAE Images</td>
<td>Business</td>
<td>Chassis</td>
</tr>
<tr>
<td>Composites-Controls</td>
<td>Electrical</td>
<td>Engine</td>
</tr>
<tr>
<td></td>
<td>Team Documents</td>
<td>Drop Off Library</td>
</tr>
<tr>
<td></td>
<td>Capstone Projects</td>
<td>Reports</td>
</tr>
</tbody>
</table>

3. **Click on your choice.**

<table>
<thead>
<tr>
<th>Libraries</th>
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</thead>
</table>
4. You will be directed to the page associated with that sub-group.

5. You will be offered multiple choices on the car number. When you press the “[+]”, the sections open up and you are offered different document types.

6. Again press the “[+]” and you will be showed the documents.
7. Once you have found the document you want to open, click the box next to it and the menu bar at the top of the site will allow you to select “Check Out”.

8. Click the document and you will be asked if you would like to open the file, click “Yes”.

9. The document will begin opening and ask you to input your ISO-login and ISO-password again.

10. When the document opens, you may receive a warning to tell you that the document is “Read Only”, click “Edit”.

11. Make any changes to the document necessary then hit save.

12. When you close the document, you will be asked to check the document in. Click “Check In” which will allow other members of the team to use and edit the sheet.

13. After you have clicked “Check In”, you will be asked to include a description of what you changed. Also, (depending on the document) this dialogue box will prompt you to provide the version of the document (it gives descriptions of what each revision level would include.) Please fill this out then click “Check In” again.
An Alternate Way to Check in a Document: Like a Little Reminder Every Time

1. While you have a Microsoft Office program open (Excel, Word, PowerPoint, etc.), look to the upper left corner of the screen. Click the downward arrow button.

2. A dropdown menu will open; choose “More Commands”.

3. Another window will open with many options; from the first dropdown menu, choose “All Commands”
4. The window will then display all possible options on the left and the icons currently displayed in the top left corner of the program on the right.

5. You will need to choose two options; “Check In” and “Discard Check Out”, to find these options, scroll through the box on the left. Items are in alphabetical order. To add an item, select it in the left box and click the “Add” button.

6. The right side bar should look like this when you have added the two necessary items:
7. Once you have added the final items, the top left of your window should have new icons like this: