# **Heuristic Evaluation of MassMine:**

# Introduction:

Heuristic evaluation is a method to inspect websites and check their usability based on certain thumb rules / guidelines.

# **Evaluation:**

The following is the heuristic evaluation of MassMine based on the 10 guidelines by Nielsen. I have chosen a rating scale of 1-5, where one is the least satisfied and 5 is the most satisfied.

#### **Heuristic:**

Visibility of system status

# **Description:**

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

### **Comments (Website):**

- The MassMine website has clear sections and headings that keep the user informed of which section of the website they are on.
- It doesn't, however, highlight the section the user is viewing on the dropdown menu in the left

### Score: 4

### Comments (Prototype):

- The prototype clearly shows the user which page they are on by highlighting the tab of the page.
- It has clear sections and links for all the sections on different parts of the page, making it easy to navigate.

#### Score: 5

#### **Heuristic:**

Match between system and the real world

#### **Description:**

The system should speak the user's language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

# Comments (Website):

- Most of the information on the website is in simple language and is easy enough for a novice user to understand.
- Some technical information hasn't been explained and can confuse the novice user.

Score: 5

### **Comments (Prototype):**

- The prototype uses simple language and design to help the user understand and navigate through the website with ease.
- Using highlighted buttons makes it convenient for the user to know where to click.
- The use of technical terms is a lot more limited than the website.

Score: 5

### **Heuristic:**

User control and freedom

# **Description:**

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

# **Comments (Website):**

The dropdown menu present on the left panel of the site has links to all the sections
of the website and the user can go to a desired section from an unwanted section in
a hassle-free manner.

Score: 5

### **Comments (Prototype):**

 The user can just click the navigation buttons (back/home) to leave an unwanted state.

Score: 5

#### **Heuristic:**

Consistency and standards

#### **Description:**

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

### Comments (Website):

 Some of the technical terms could confuse the novice user (This is inevitable) but overall, the site uses simple words / language that we use in everyday life, making it easy for any user to understand.

Score: 5

#### **Comments (Prototype):**

• The prototype uses easy everyday language and is similar to other websites in terms of navigation and layout, making it effortless for the user to use the site.

#### **Heuristic:**

Error prevention

### **Description:**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

### **Comments (Website):**

 The scope for error on the website is less as it mostly has only documentation for the user to refer.

Score: 5

# **Comments (Prototype):**

• Since the prototype is still in its initial stages and ins't fully functioning, it is hard to comment of this heuristic

Score: N/A

#### **Heuristic:**

Recognition rather than recall

### **Description:**

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

# **Comments (Website):**

 The user doesn't have to remember all actions. All the links to the various sections of the website are present clearly. Although, many commands need to be memorized by the user, for their own convenience, but they can always refer to the documentation present on the website to overcome any difficulties faced while learning to use MassMine.

Score: 3

#### **Comments (Prototype):**

 The prototype doesn't require the user to memorize information. Everything is clear and easy to navigate, so the user can follow the navigation to perform the desired tasks.

#### **Heuristic:**

Flexibility and efficiency of use

### **Description:**

Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

# Comments (Website):

 Novice users can download and use the current version of MassMine from the website and expert users, who are interested, have the option of building the application from scratch.

Score: 5

# **Comments (Prototype):**

- The prototype site can be used with ease by novice and expert users alike because of its simple, easy to navigate design.
- The site also gives the user an option to choose a method convenient to them.

Score: 5

#### **Heuristic:**

Aesthetic and minimalist design

#### **Description:**

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

### Comments (Website):

- The website has all the information needed to successfully install and use MassMine.
- It is a small website with simple design that addresses the needs of the user well. It doesn't have any unnecessary graphics or distractions.

Score: 5

### **Comments (Prototype):**

• The prototype is simple and effective in its design, helping the user perform the desired tasks with ease. It doesn't have any unnecessary graphics or distractions.

#### **Heuristic:**

Help users recognize, diagnose and recover from errors

### **Description:**

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

### Comments (Website):

- MassMine has a help command that can be used if the user needs help. The user can also refer to the detailed documentation that is present on the website for any assistance. The documentation is in simple language along with the code that can be used as solution.
- It doesn't have a form or a way to contact the developers / MassMine team, in the rare case that all other options fail. Having a way to contact the official team is a great way to know the difficulties that the users are facing directly from the users.

Score: 4

# **Comments (Prototype):**

- The prototype has a specific page dedicated to help the users.
- It has a list of FAQs that'll let the user solve most problems on their own. It also has instructions on performing other tasks.

Score: 5

#### **Heuristic:**

Help and documentation

### **Description:**

Even though it is better if the system can

be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

#### Comments (Website):

 MassMine has detailed documentation for every step from before installation to analyzing the data. Just like any other command line tool, it has a specific command (—help) that can be used in case a user is stuck and needs help.

Score: 5

# Comments (Prototype):

- The prototype has a dedicated help center that users can access if they face any difficulties.
- In case their problem isn't solved, they can reach out to MassMine via the contact details provided in the footer of the site.

# **Conclusion:**

The prototype is still not fully functional so a lot of the tasks can't be performed yet, but just from the initial functionalities itself, it looks very convenient especially for novice users who are not comfortable with the command line interface. It also includes some of the features that are not present in the current website, making it slightly better than the current model. The current model is also convenient with few minor difficulties. Overall, I felt that both options are very effective but the prototype could turn out to be a slightly more convenient website.