#securemanufactureui

CSC 591, Spring 2020

Stage 3 – Choose

Team:

#	Name	Unity Id
1	Tushar Himmat Dahibhate	tdahibh
2	Yang-Kai Chou	ychou3
3	Rajshree Jain	rjain27
4	Satanik Ray	sray7
5	Ankit Arvind Tiwari	atiwari4

Display and Votes:

Before meeting professor or client, we list down our ideas on a shared word file without writing our names on it. After a deadline that was fixed, we started to vote.

Votes are indicated by: 📦

1. Asset Management – Adding/Removing a machine
   - Provides an interface to add and remove any machine.
   - Has a functionality to authenticate a technician and maintain a paper trail.
   - Provides a wizard to ensure all the installation/uninstallation steps are followed and, maintains a log of any action performed.

2. Asset Management – Scheduling maintenance
   - Provides an interface to schedule maintenance of the machines.
   - Has a functionality to authenticate the technician performing any maintenance or calibration activities and maintain a paper trail.
   - Provides a wizard to ensure all the maintenance/calibration steps are followed and, maintains a log of any action performed.

3. Asset Management – View machines
   - Provides a functionality to view all the active and inactive machines as well as their detailed information.
   - The interface also contains a dashboard highlighting all the key performance indicators.

4. Log file for recovery 📦 📦
   - Provides a functionality to access the job logs
   - This would be particularly useful in case of job failures and errors for data recovery
   - Also, paper trail being an important part of the SAMM functionality, logs would play an important part in accountability and audit.

5. Configuration 📦
   - Provides a functionality to access the job configurations or pre-requisites

- This would be particularly useful for automated job runs where the configurations can be centrally monitored and needn't be entered individually for jobs of same class

6. Calendar

- Schedules and timeslots are an important part of the application, hence imperative to maintain schedule effectively. This functionality would provide that.

7. Dashboard / Monitoring

- This provides comprehensive information on jobs, job statuses, job types, job executions, node usage, etc.

- This would be particularly useful for report generation

8. Assigning Security Levels

- Floor manager gets the ability to assign access policies to the Operators

- Enabling restricted access to the SAMM users

9. Secure File Transfer
- Allows a secure file transfer channel for the CAD files.
- Would prevent from the usage of flash drives and chances of file getting corrupt.

10. Troubleshooting Wizard
- Would provide sufficient help in form of virtual assistance to resolve different issues
- Determine the seriousness of the issues based on the problem being faced

11. Connect to SAMM by your remote device (mobile, laptop, PC etc.)
- Give you access to the SAMM machine from far
- Allow you to manage the tasks from away and only go to the machine for necessary tasks

12. Multifactor Authentication
- Ensures secure access to the SAMM machine

13. Over the top animations
- To convey the severity of a task by showing graphics corresponding to the severity.

14. Multiple level of abstraction of error details
- Will give operator the power to choose between how much detailed they want their errors to be shown.

15. Eye, finger or card for authentication
- They are quick and secure.

Meeting

After that, we had zoom meeting. The meeting was held via zoom on Friday, 3rd April 2020. The members of the meeting were above-mentioned team-members, Prof. Watson and Elijah Morgan from Secmation.
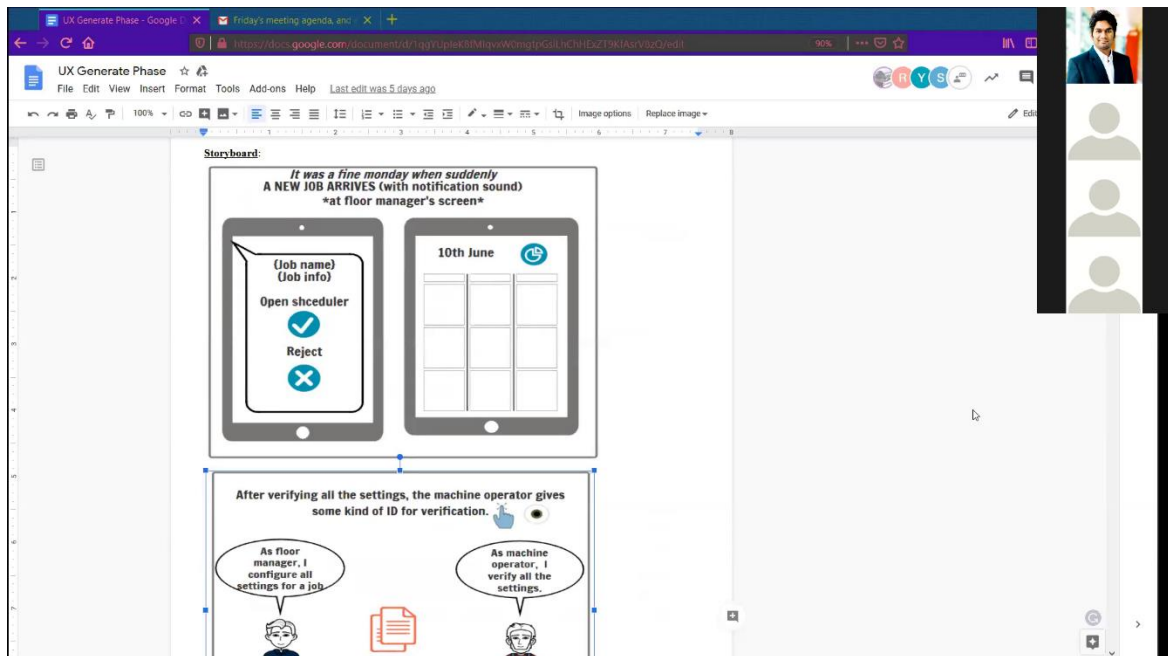
During the meeting, all the ideas were discussed, and following ideas were recognized as the most essential one:

1. Calendar
2. Alert
3. Wizard
4. Two factor Authentication
5. Configure/audit
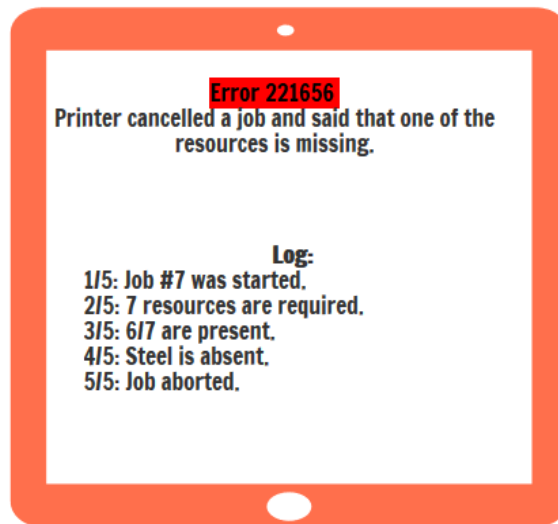
Decider's votes

Following is a transcript of the voting session:

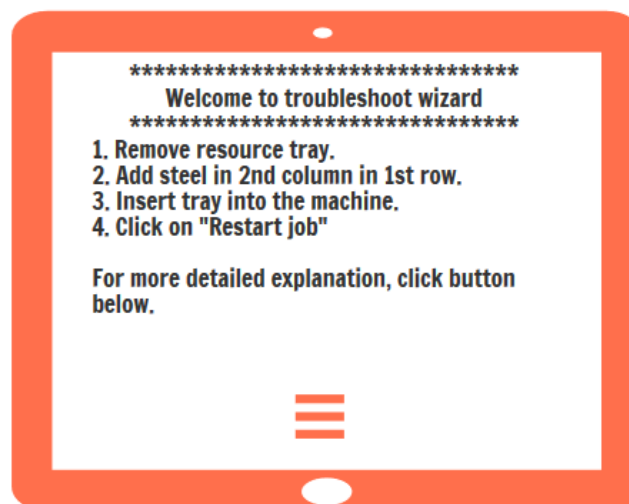We all got one vote and Elijah got 3 votes.

14:52:09   From Ben Watson : 1) calendar
14:52:12   From Ben Watson : 2) alert
14:52:15   From Ben Watson : 3) wizard
14:52:28   From Ben Watson : 4) two factor auth
14:52:47   From Ben Watson : 5) configure/audit
14:54:37   From Tushar Himmat Dahibhate: 3
14:54:39   From Yang-Kai : 1
14:54:42   From Ankit Arvind Tiwari : 3
14:54:48   From Satanik Ray: 5
14:54:51   From Elijah Morgan : 2) 1
3) 1
5) 1
14:54:56   From rjain27 : 3.
14:55:33   From Ben Watson : 1: 1
14:55:37   From Ben Watson : 2: 0
14:55:44   From Ben Watson : 2: 1
14:55:55   From Ben Watson : 3:4
14:56:06   From Ben Watson : 4: 0
14:56:13   From Ben Watson : 5: 2

As seen, option 3 and 5 got the most votes and hence, we have chosen those as to concentrate for our storyboard and next phase.

Storyboard:

Error 221656
Printer cancelled a job and said that one of the
resources is missing.

Log:
1/5: Job #7 was started.
2/5: 7 resources are required.
3/5: 6/7 are present.
4/5: Steel is absent.
5/5: Job aborted.

* operator clicks on error (in red) to trouble shoot *

```
*****************************
```
Welcome to troubleshoot wizard
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*****************************
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1. Remove resource tray.
2. Add steel in 2nd column in 1st row.
3. Insert tray into the machine.
4. Click on "Restart job"

For more detailed explanation, click button
below.

≡

* a more detailed wizard opens *

Step 1. Remove resource tray.

Remove the resource
tray that looks like
this.