Alpha Presentation
Performance Scorecard Automation

The Capstone Experience
Team United Airlines Airport Operations

Noah Little
Danny Lee
Griffin Klevering
Guanzhang Zheng
Cynthia Trocinski

Department of Computer Science and Engineering
Michigan State University
Spring 2022
Project Overview

• Safety scorecards are time consuming to create and can have human error
• Will automate scorecards to prevent this
• Users enter data sheets, a PowerPoint template, and create a design to format their scorecard
• System automatically generates a scorecard using the selected data and the user’s design
• Allow a user’s design to be reused with future data files to generate future scorecards with no effort from the user
System Architecture
Menu Screen
Shape Content Screen

Shape Content Editor

<table>
<thead>
<tr>
<th>INFO</th>
<th>INFO</th>
<th>INFO</th>
<th>INFO</th>
<th>INFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row Header:</td>
<td>Column Header:</td>
<td>Data Search Range:</td>
<td>Workbook:</td>
<td>Worksheet:</td>
</tr>
<tr>
<td></td>
<td>State Damage Rate</td>
<td>Data</td>
<td>Workbook_Security_Brief.xlsx</td>
<td>DEN</td>
</tr>
</tbody>
</table>

Back  Submit
Addition Screen

Chart:

Horizontal Axis Label:
Hubs

Vertical Axis Label:
Injuries

Color:
Red
Blue

Comparison:

Specific Value
Look Up Value
Color:
Black
Red

Specific Value
Look Up Value
Color:
Black
Red

Back
Submit
Design Shape List

![Design Menu Window]

- **Shape 0**: Overall Damages
- **Shape 1**: Content Select
- **Shape 2**: Reasons for Damage:
- **Shape 3**: Content Select
- **Shape 4**: Content Select

Buttons: Back, Clear, Submit
What’s left to do?

• Implement Graph data saving and loading
• Create Graphs using PowerPoint with loaded data
• Implement Comparison Data saving and loading
• Affect colors on PowerPoint with Comparison Data
• Implement allowing the user to click on a PowerPoint shape and Excel cell to select data
Questions?