

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Performance Scorecard Automation

The Capstone Experience

Team United Airlines Airport Operations

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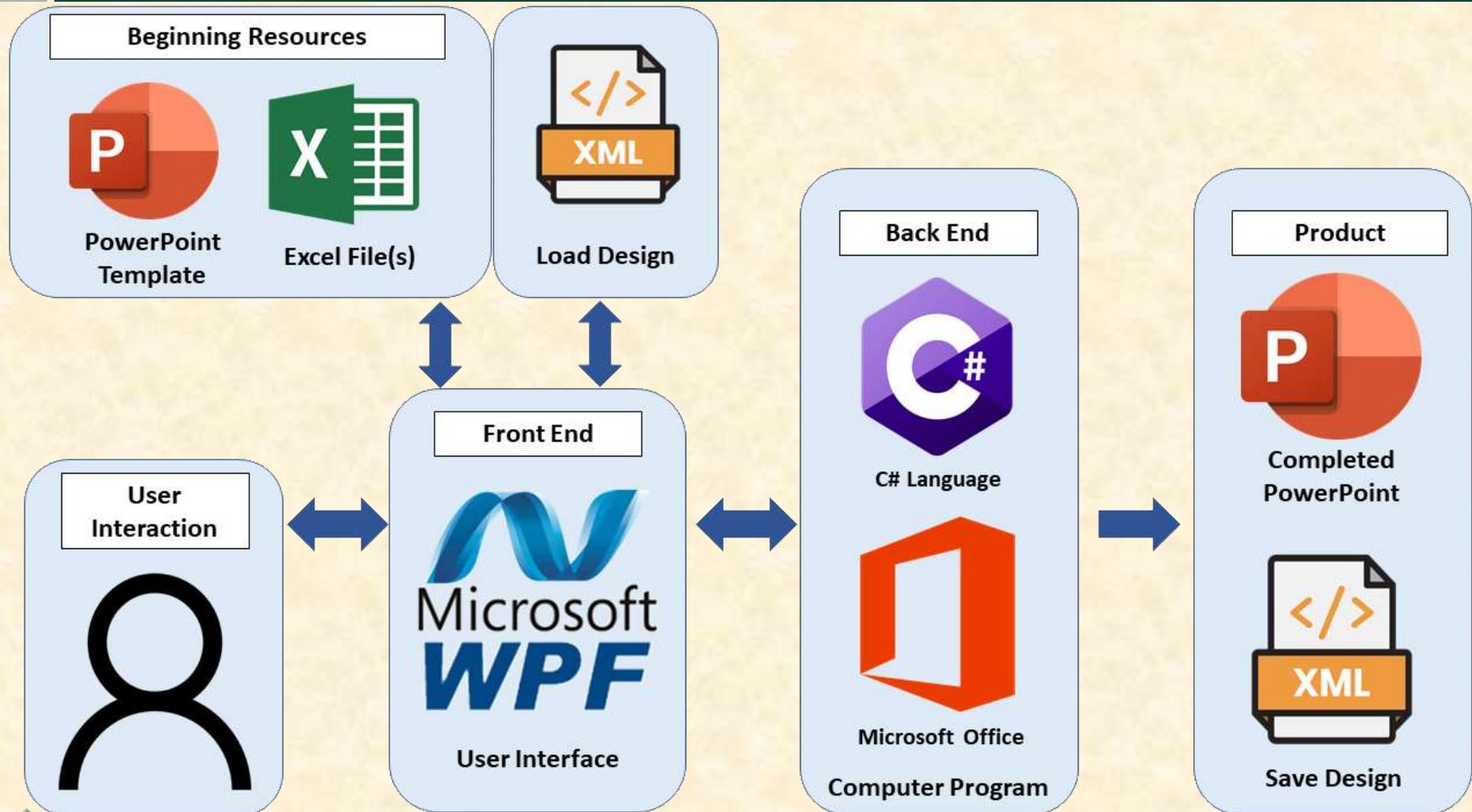
*From Students...
...to Professionals*

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

United Airlines Scorecard Generator

UNITED 

Excel Spreadsheets Selection

WorkBook_Safety_Brief_V4.xlsx

PowerPoint Template Selection **Design Selection**

202203_ScoreCard.pptx Design1.xml

PowerPoint Destination

C:\Users\kleve\Documents\Classes\CSE498
\ScoreCard_1.pptx



Shape Content Screen

ContentMenu

Shape Content Editor

INFO	Row Header:	State Damage Rate
INFO	Column Header:	Data
INFO	Data Search Range:	A2:K16
INFO	Workbook:	Workbook_Security_Brief.xlsx
INFO	Worksheet:	DEN
INFO	Default Value:	0

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Submit



Addition Screen

AdditionMenu

Chart:

Horizontal Axis Label:
Hubs

Vertical Axis Label:
Injurs

Color: Red Blue

Comparison:

< Specific Value Look Up Value Color: Black Red

> Specific Value Look Up Value Color: Black Red

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Design Shape List

DesignMenu

Design

Shape	PlainText	Content Select	Additional Select
Shape 0	Overall Damages	Content Select	Addition Select
Shape 1		Content Select	Addition Select
Shape 2	Reasons for Damage:	Content Select	Addition Select
Shape 3		Content Select	Addition Select
Shape 4		Content Select	Addition Select

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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?

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