

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Dynamic Visualization of Architecture Diagrams

The Capstone Experience

Team Stryker

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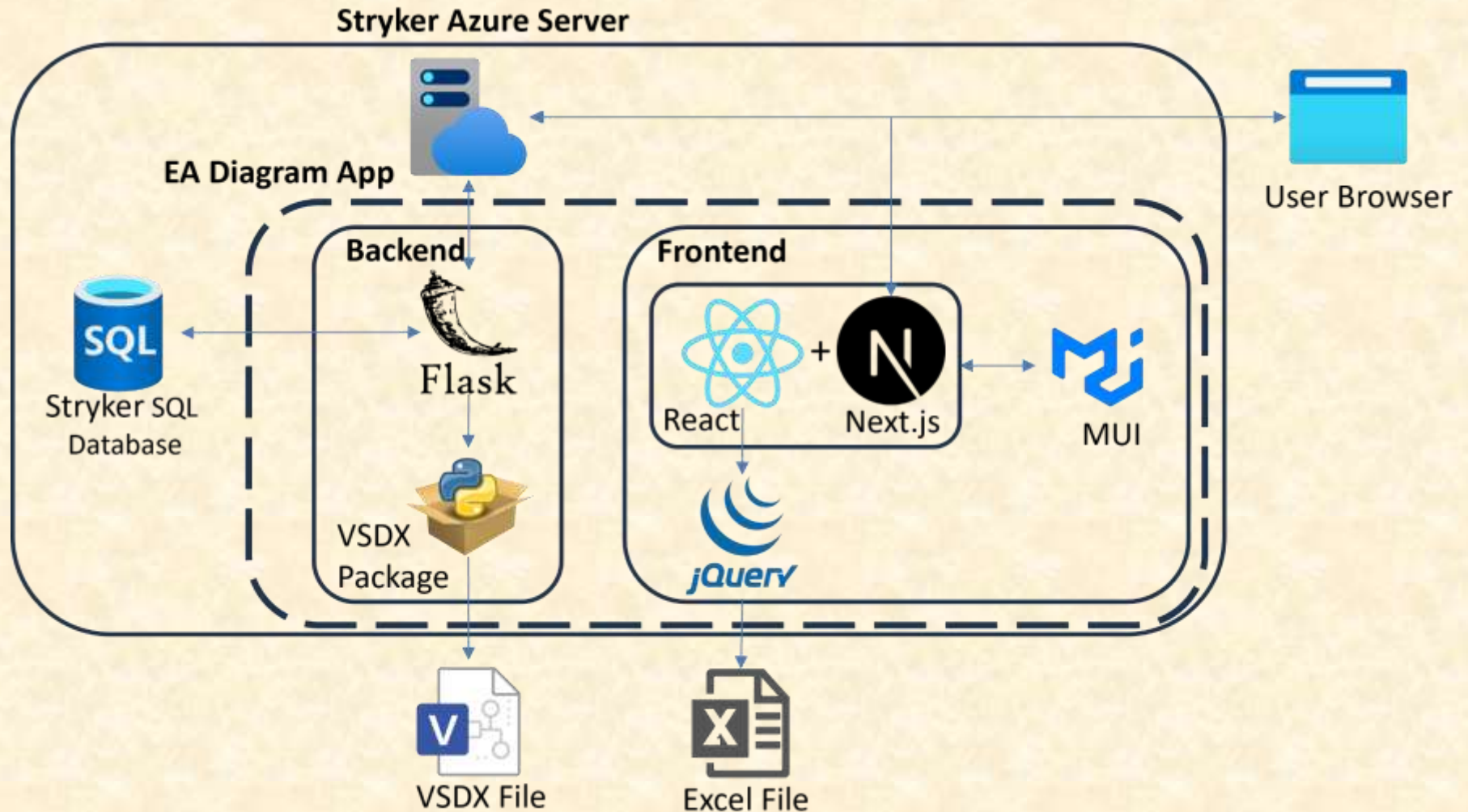
*From Students...
...to Professionals*

Project Overview

- Current architecture diagrams are done solely by hand by Stryker CoE architects.
- Diagrams can be extremely complex.
- Generate an optimized and functional diagram.
- Search results and options help build the architecture diagram.
- Workers will be able to save lots of time and mistakes are mitigated.



System Architecture



Category Search Page

stryker Category Search Text Search Template Creator About Index (Testing)

Source System: 3PL - ASEAN ZP

Target System: Target System

Project Number: Project Number

Major Program: Major Program

SEARCH RESET

GENERATE EA DIAGRAM

EXPORT ALL ROWS TO EXCEL EXPORT SELECTED ROWS TO EXCEL

All of this:

AND +

ADD A FILTER BLOCK +

RESULTS TABLE

Select	Row	CSI Number	Integration Name	IT Number	Integration Pattern	Integration Platform	Primary Source System	Primary Target System	Source Protocol	Target Protocol	Additional Systems	Region	Division	PRJ	CHG	Major Program	Doc URL
<input type="checkbox"/>					1-Way Scheduled	MFT	Sinco Centrac	LabVantage		Sin/Network Share	Sinco Centrac	Global	Instruments	PRJ0341412			
<input type="checkbox"/>					1-Way Scheduled	MFT	Sinco Centrac	LabVantage		Sin/Network Share	Sinco Centrac	Global	Instruments	PRJ0341412			



Template Creator Page

stryker Category Search Text Search Template Creator About Index (Testing)

Enterprise System Integration (ESI) Template Creator

Number of Systems

Number of Systems

2

System 1 to System 2

Field 1

3

System 2 to System 1

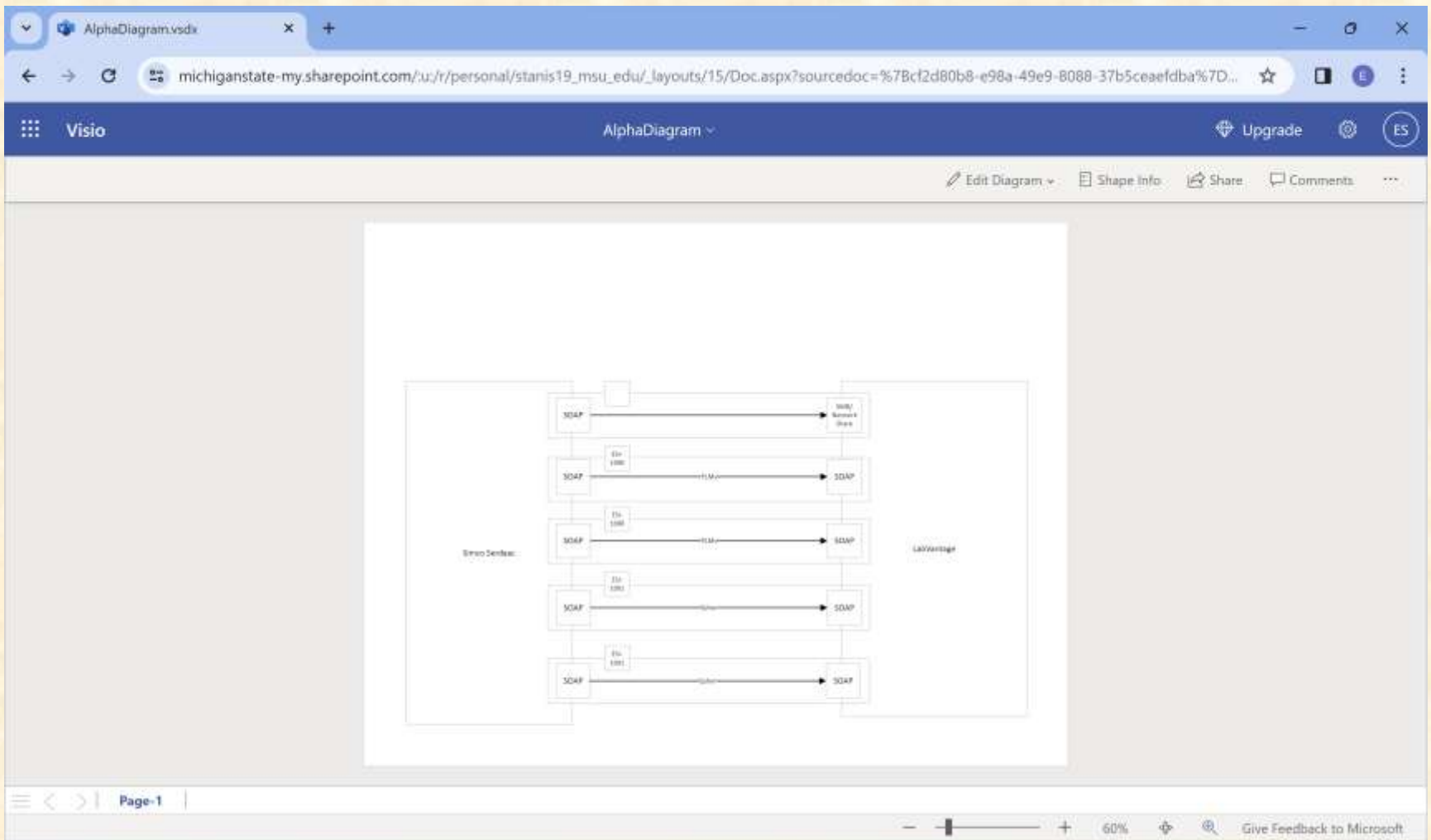
Field 2

5

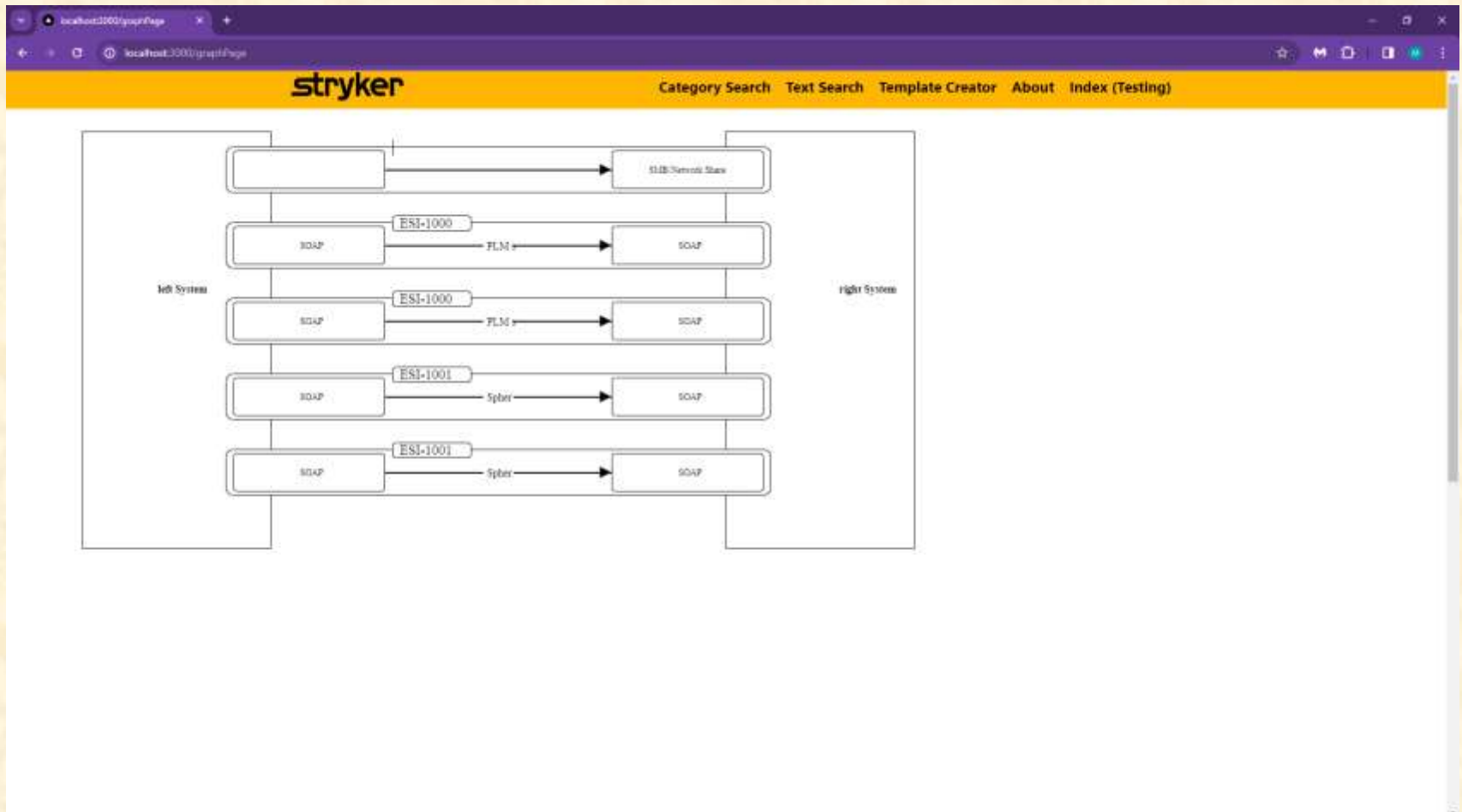
GENERATE VISIO TEMPLATE



Back End Architecture Diagram



Front End Architecture Diagram



What's left to do?

- Complete graph drawing algorithm to minimize the edge crossings and refine layout.
- Fix arrow drawings to accurately represent the database information.
- Implement options for users to view boxes/numbers or not.
- Refine edge routing paths.



Questions?

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