

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Dealer Improvement Recommender System

The Capstone Experience

Team Urban Science

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

Project Overview

- Four components
 - SQL database
 - Application server
 - Web client
 - iPad app extension



Project Overview

- Web client
 - Visually displays the Logic Tree model
 - Provides a way for users to edit the Logic Tree
- iPad app extension
 - Create action plans for dealerships
 - Read-only access to database

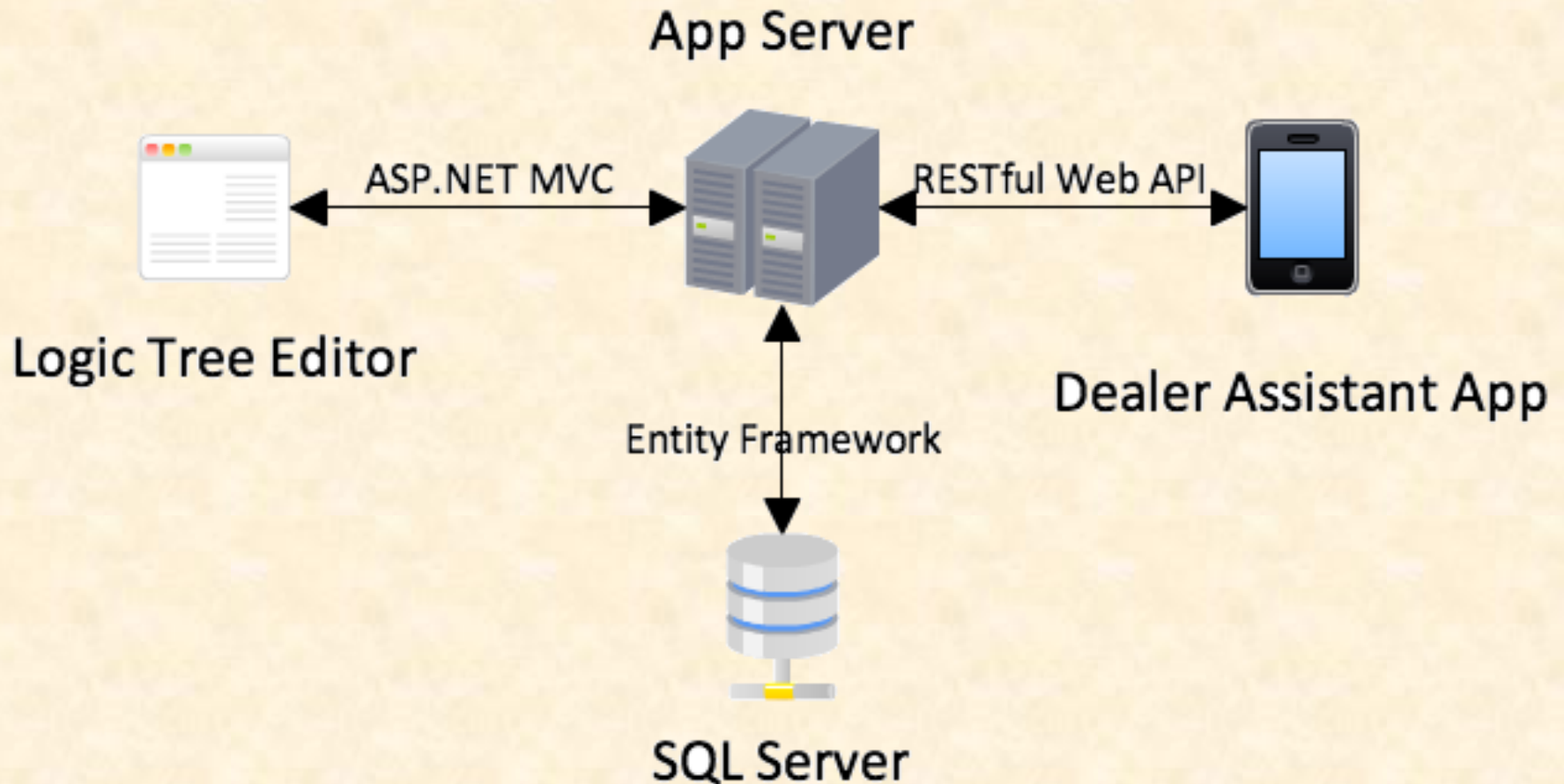


Project Overview

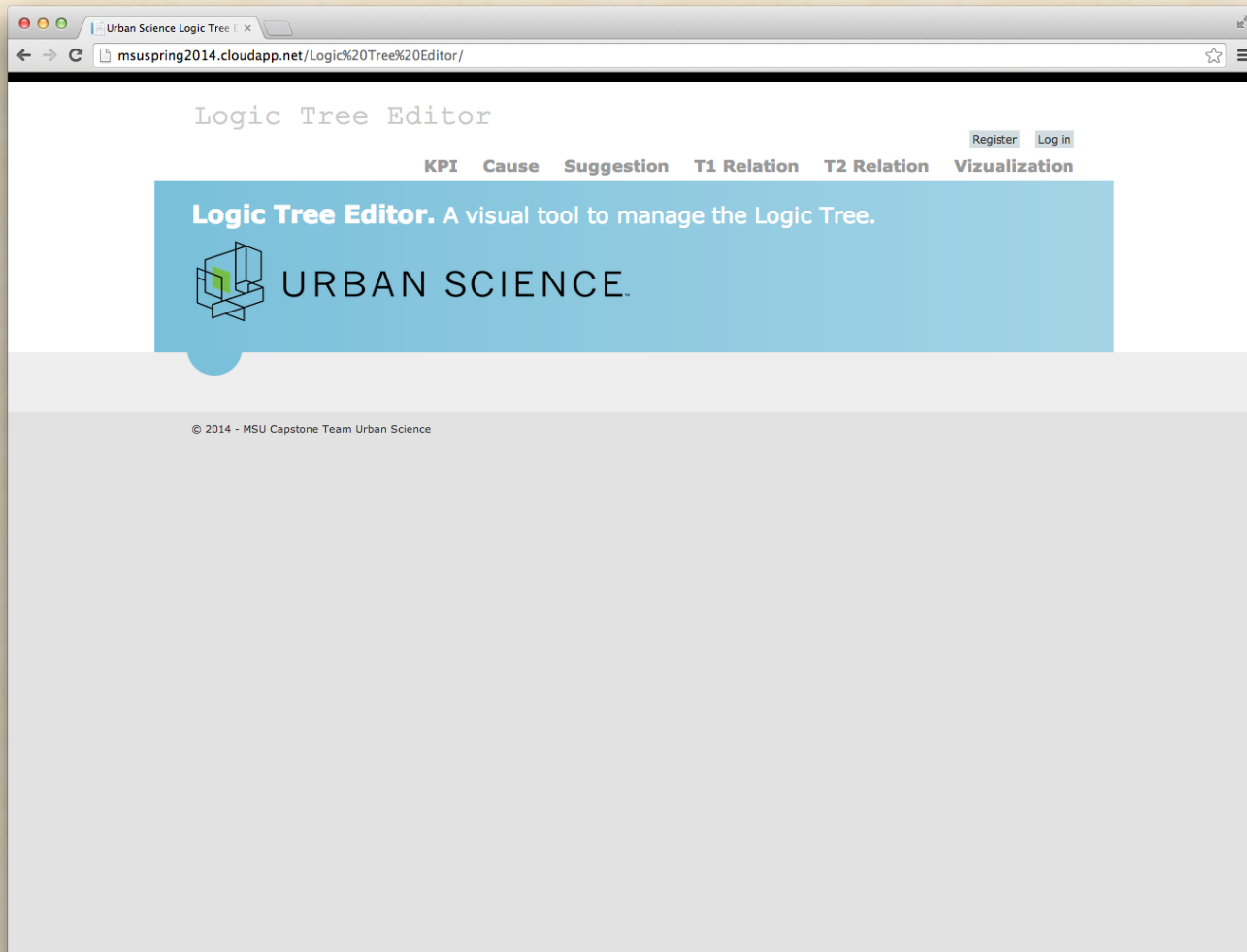
- SQL database
 - Models the Logic Tree
 - Records changes
- Application server
 - Provides access to database
 - REST layer for iPad



System Architecture



Home Screen



KPI View

The screenshot shows a web browser window with the URL `msuspring2014.cloudapp.net/Logic%20Tree%20Editor/KPI`. The page title is "Logic Tree Editor". In the top right corner, there are links for "Register" and "Log in". Below the title, a navigation menu includes "KPI", "Cause", "Suggestion", "T1 Relation", "T2 Relation", and "Vizualization". The main content area is titled "Index" and includes a link for "Create New". It features a table with the following data:

Name	Definition	Standard	Formula	Group	
Ty Jones	Ty is awesome!	A standard!	$e^{(\pi*i)}+1=0$	Team Urban Science	Edit Details Delete
Ben Mastay	Ben is awesome!	A standard!	$a^2+b^2=c^2$	Team Urban Science	Edit Details Delete
Collin Myers	Collin is awesome!	A standard!	$\sin(\theta)^2 + \cos(\theta)^2 = 1$	Team Urban Science	Edit Details Delete

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KPI Create

The screenshot shows a web browser window with the URL `msuspring2014.cloudapp.net/Logic%20Tree%20Editor/KPI/Create`. The page title is "Logic Tree Editor". In the top right corner, there are links for "Register" and "Log in". A navigation menu below the title includes "KPI", "Cause", "Suggestion", "T1 Relation", "T2 Relation", and "Vizualization". The main content area is titled "Create" and contains a form with the following fields: "Name", "Defininition", "Standard", "Formula", and "Group". Each field is represented by a white input box. Below the form is a "Create" button and a "[Back to List](#)" link. At the bottom of the page, there is a copyright notice: "© 2014 - MSU Capstone Team Urban Science".



Cause View

The screenshot shows a web browser window with the URL `msuspring2014.cloudapp.net/Logic%20Tree%20Editor/Cause`. The page title is "Logic Tree Editor". In the top right corner, there are links for "Register" and "Log in". Below the title, a navigation menu contains the following items: "KPI", "Cause", "Suggestion", "T1 Relation", "T2 Relation", and "Vizualization". The main content area features an "Index" section with a "Create New" link. Underneath, there is a "DescriptionGroup" table with two rows of data:

DescriptionGroup		
Cause 1	Think	Edit Details Delete
Cause 2	Think	Edit Details Delete

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Suggestion View

The screenshot shows a web browser window with the URL `msuspring2014.cloudapp.net/Logic%20Tree%20Editor/Suggestion`. The page title is "Logic Tree Editor". The navigation menu includes "KPI", "Cause", "Suggestion", "T1 Relation", "T2 Relation", and "Vizualization". There are "Register" and "Log in" buttons in the top right. The main content area features an "Index" section with a "Create New" link. Below this is a "DescriptionGroup" table with two entries:

DescriptionGroup		
S1	Think	Edit Details Delete
S2	Team Urban Science	Edit Details Delete

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Relationship Create View

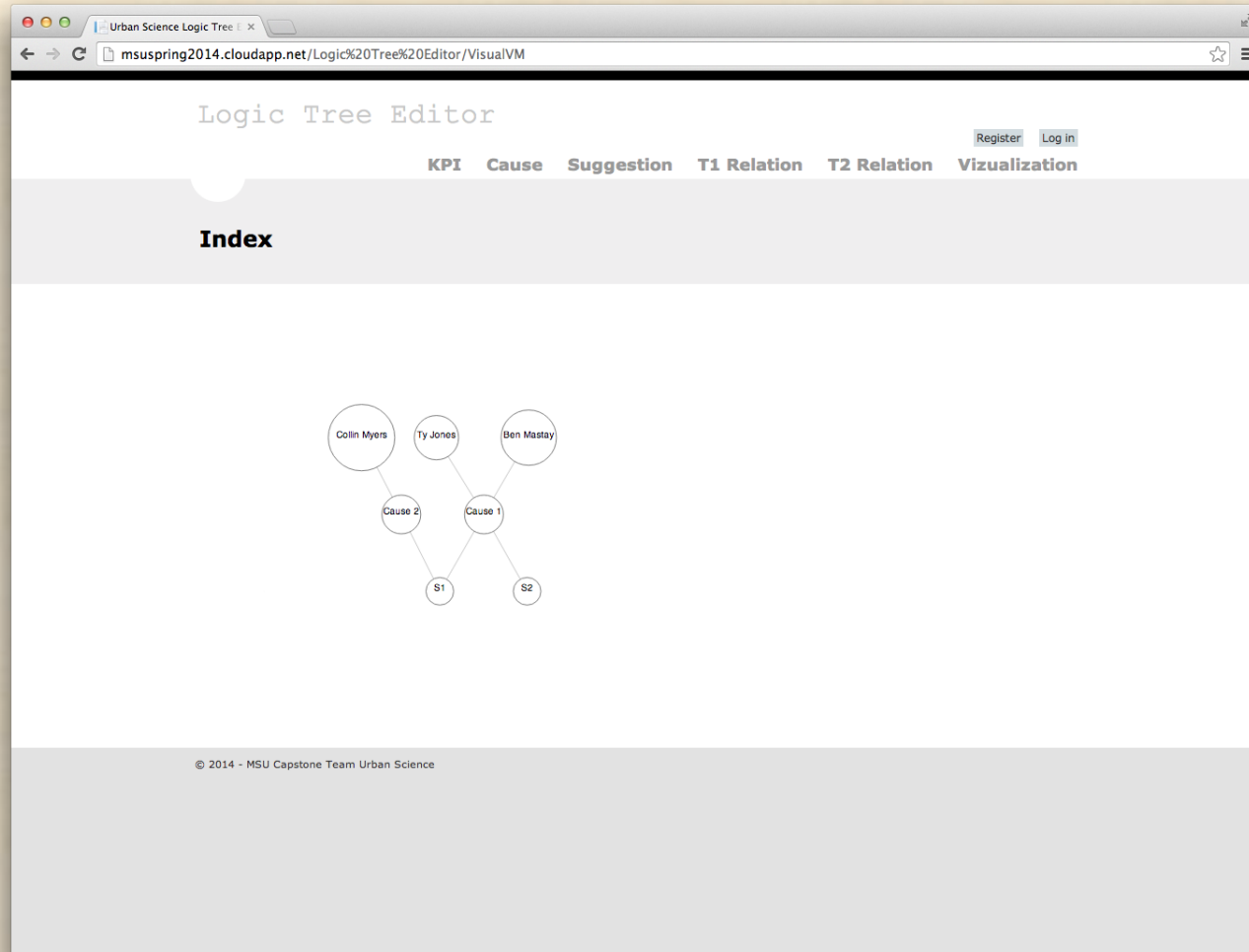
The screenshot shows a web browser window with the URL `msuspring2014.cloudapp.net/Logic%20Tree%20Editor/KpiCauseRelation/Create`. The page title is "Logic Tree Editor". In the top right corner, there are links for "Register" and "Log in". A navigation menu below the title includes "KPI", "Cause", "Suggestion", "T1 Relation", "T2 Relation", and "Vizualization". The main content area is titled "Create" and contains the following form elements:

- KPI**: A dropdown menu.
- Cause**: A dropdown menu.
- Weight**: A text input field.
- Create**: A button.
- [Back to List](#): A link.

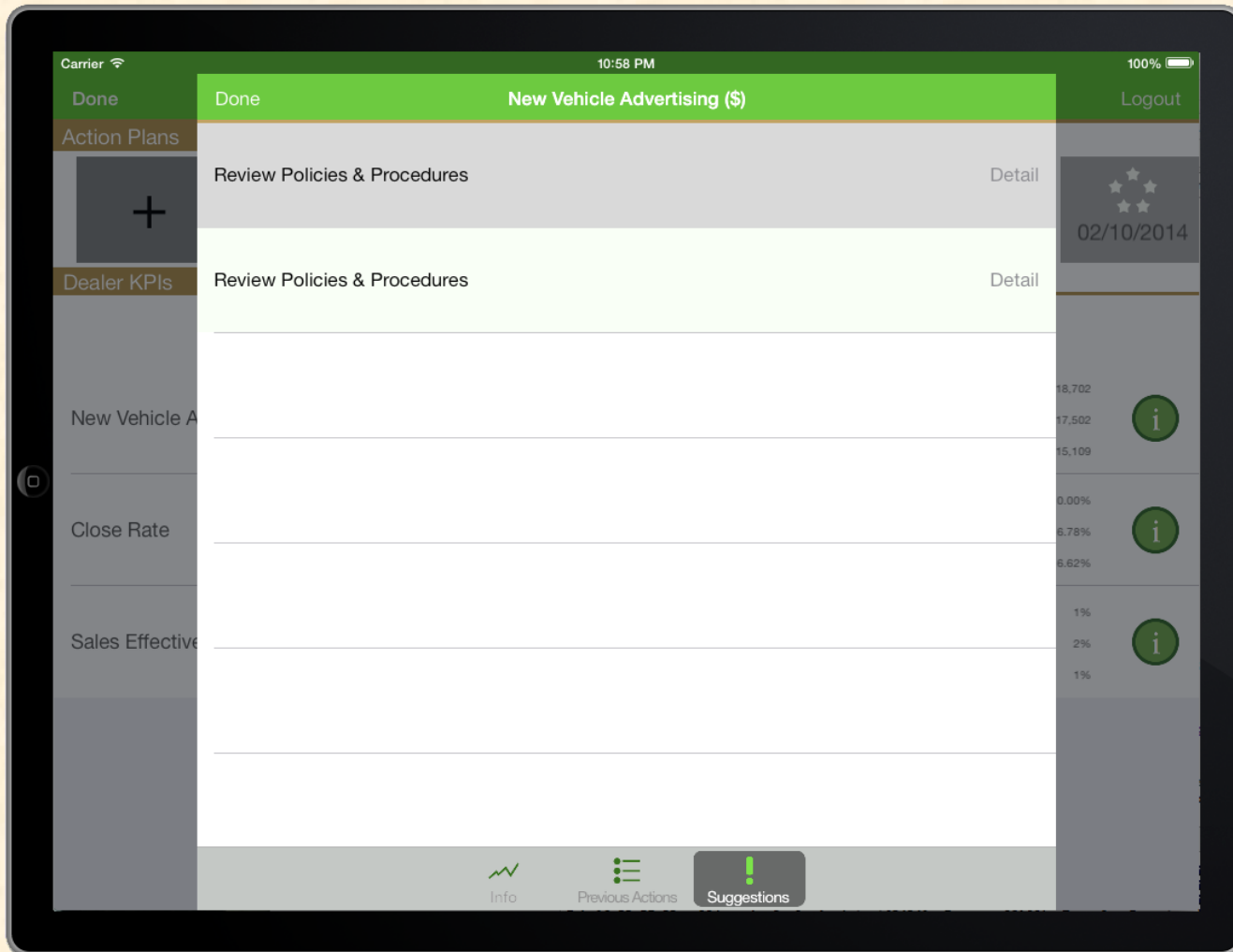
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Logic Tree Visualization



iPad App Extension



What's left to do?

- Complete D3.js for use case actions
 - Only displays nodes
 - No way to modify the tree with the visualization
- Single page application
 - Currently uses different pages for each view
 - Simplify interface to a single view
- Finish read-only API for iPad app
- Reconcile database from previous semester

