#### **MICHIGAN STATE** UNIVERSITY **Project Plan Presentation Universal Guided Web Editor The Capstone Experience** Team Roosevelt Innovations Knowledge Science **Ryan Dukovich** Joseph Finnegan **Eunhye Park** Michael Schmauderer Joey Vesche

Department of Computer Science and Engineering Michigan State University

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### **Project Sponsor Overview**

- Subsidiary of Delta Dental
- Deliver simple, smart automation for business
- Allows to focus on growth
- Business Rule Management System (BRMS)
- Create intuitive, non-technical online rule editor
- Develop, test, deploy, and maintain business logic

### **Project Functional Specifications**

- Allow users to edit business models without external software
- Precise editing, mitigating potential mistakes
- Create specific and complex business rules without other technical team members
- Minimal learning curve; Easily navigable

## **Project Design Specifications**

- Select Business Rule template
- Be presented with blank rule
- Fill the rule with desired constraints
- Save the business rule

#### Screen Mockup: Business Rule Options

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Tags

# Screen Mockup: Creating Rule

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-Q-	Rule HCX00902_SCY	Rule Management			
	Description: Treatment Category:				
	Rule Content Definitions				
Q average	set Eligibility Reinstate to a Biller Subscriber Adjustment where [not] Adjustment Reason OF this Billing Subscriber Agreement is : ELIGIBILITY_REINSTATE +				
Losout	If [not] : Adjusted Billing Cycle OF Eligibility Reinstate is Adjusted Billing Cycle OF • Then	<pre><select variable=""> Coverage Type Change Billing Type Change Coverage Exception</select></pre>			
	: Set Adjustment Reason OF Coverage Type Change TO : ELIGIBILITY_REINSTATE : Set Coverage Type of Eligibility Reinstate TO : Adjusted Coverage Type OF Coverage T : Record Rule Name •	ype Change			
	Rule History				
The Capsto	Ne Experience Team Roosevelt Innovations Knowledge Science Project Plan Presen	tation			

## Screen Mockup: Viewing Rule History

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ALIZATIONS	Rule HCX00902_SCY	Rule Management
DCUMENTS	Description:	Treatment Category:
	Rule Content	
Q SMITTEM	Rule History	
<b>C+</b>	You edited this Rule on Septemi Doe, Jane edited this Rule on Se Doe, Jane edited this Rule on Se Frost, Robert edited this Rule or Smith, John created this Rule or	eptember 2, 2023 13:45:02 eptember 2, 2023 09:21:32 n August 19, 2023 16:01:47

# Screen Mockup: Selecting Rule

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Roosevelt <sup>®</sup> BRIDE		
Rule HCX00902_SCY		Rule Management
Description:	Uploaded Rules:	
Rule Content	Electronic Reports - USA_BY	
Rule History	BORA00004 BORA00011	
You edited this Rule on Sec Doe, Jane edited this Rule Doe, Jane edited this Rule Frost, Robert edited this Ru Smith, John created this Ru	BORA00012 BORA00013 BORA00017 BORA00019 BORA00020 BORA00025	
	Default Misc. Radiographs HCX00902_SCY HCX01106_SCY HCX01302_SCY	
	Rule HCX00902_SCY  Description:  Rule Content  Rule History  You edited this Rule on Ser Doe, Jane edited this Rule of Doe, Jane edited this Rule of Frost, Robert edited this Rule of	Rule > HCX00902_SCY         Description:         Rule Content         Rule History         You edited this Rule on Ser         Doe, Jane edited this Rule         Doe, Jane edited this Rule         Doe, Jane edited this Rule         Frost, Robert edited this Rule         Smith, John created this Rule         BorRA00013         BorRA00013         BorRA00013         BorRA00013         BorRA00013         BorRA00013         BorRA00013         BorRA00020         BorRA00020         BorRA00020         BorRA00020         BorRA00020         BorRA00020         BorRA00025         Default Misc. Radiographs         Hcx00106_scy

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## **Project Technical Specifications**

- Angular
- ANTLR
- Bootstrap
- TypeScript
- JavaScript
- HTML

## **Project System Architecture**



### **Project System Components**

- Hardware Platforms
  - MySQL

### Software Platforms / Technologies

- ANTLR
- Angular
- Bootstrap
- JavaScript
- HTML
- TypeScript

### **Project Risks**

- Integration to existing Roosevelt web
  - Maintain consistent UI/UX for a seamless integration
  - Use correct version of Bootstrap; follow UI guidelines
- Adjustment to different input format
  - The editor needs to handle many different business rules
  - Communicate with client to resolve all inputs/syntaxes
- Computationally intensive operation in development
  - No backend; Will parse everything in the browser
  - Test heavy parsing for performance
- Create a modular solution
  - Client will integrate editor into existing website
  - Prioritize reusability when designing components

### **Questions?**



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