Workflow Management System

Technologies Used

* Front-end application: Angular 5.1.2
* Back-end web API: .Net Core 2.0
* Database: Microsoft SQL Server 2008

Implemented Features

* Create user stories
* Update user stories
* Create workflows
* View all user stories
* View all workflows
* Start execution of workflows

Assumptions

* The scoped domain only requires workflows that can validate “User Stories” stored in the system.
* User Stories & Workflows can be created separately in the system.
* User Stories must be manually entered into the system.
* One User Story can only be validated through one Workflow execution and at the end of that execution it will either be rejected or approved.
* A Workflow can be executed for many User Stories.

Limitations

* Only the manual approval validation type is implemented.
  + There is no workflow activity type where the system itself will take the decision of approval or rejection.
* Activities in a workflow cannot be re-ordered.
  + They can be added and removed sequentially.

Use Case Diagram

System User

Workflow Management System for validating User Stories

High-Level Design

Front-end Application

DB

Back-end API Services

Component Diagram – Front-end

View

Workflow

Edit

User Story

Create

Workflow

Create

User Story

View

User Story

Edit

Workflow

User Story

Service

Workflow

Service

User

Service

Workflow Execution Service

Approve/Reject Validation

Execute Workflow

ER Diagram

