School of Computing & Information Sciences

Fall 2018 Senior Design Project

FIU Engineering & Computing
School of Computing & Information Sciences

VIP Vertically Integrated Projects

mongoDB express ANGULARJS by Google node JS

Vertically Integrated Projects 9.0

Students: Marcelo Valencia, Florida International University
Instructor and Product Owner: *Dr. Masoud Sadjadi*, Florida International University

Problem

The Vertically Integrated Projects (VIP) program aims to involve everyone on campus in innovation. VIP unites undergraduate education and faculty research in a team-based context. Undergraduate VIP students earn academic credits, while faculty and graduate students benefit from the design/discovery efforts of their teams.

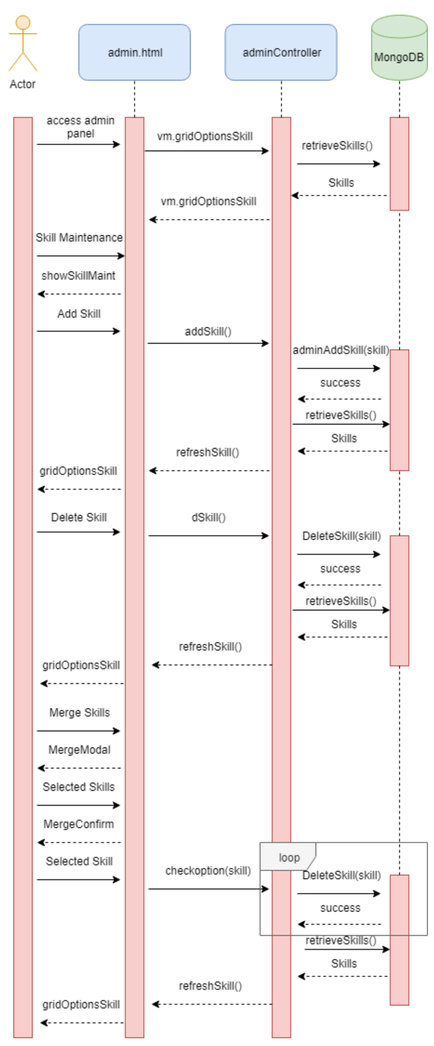
Current System

The current system is a website using the MEAN stack

Requirements

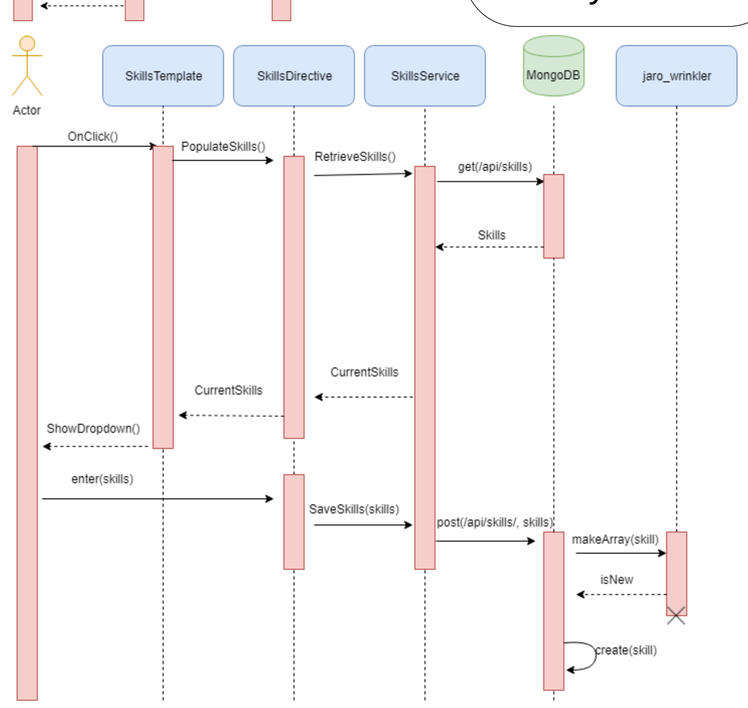
- Skills must display correctly
- Users should be able to autocomplete a skill in line
- Skills need to be saved differently
- Admins need to be able to access skills to edit or delete

Implementation



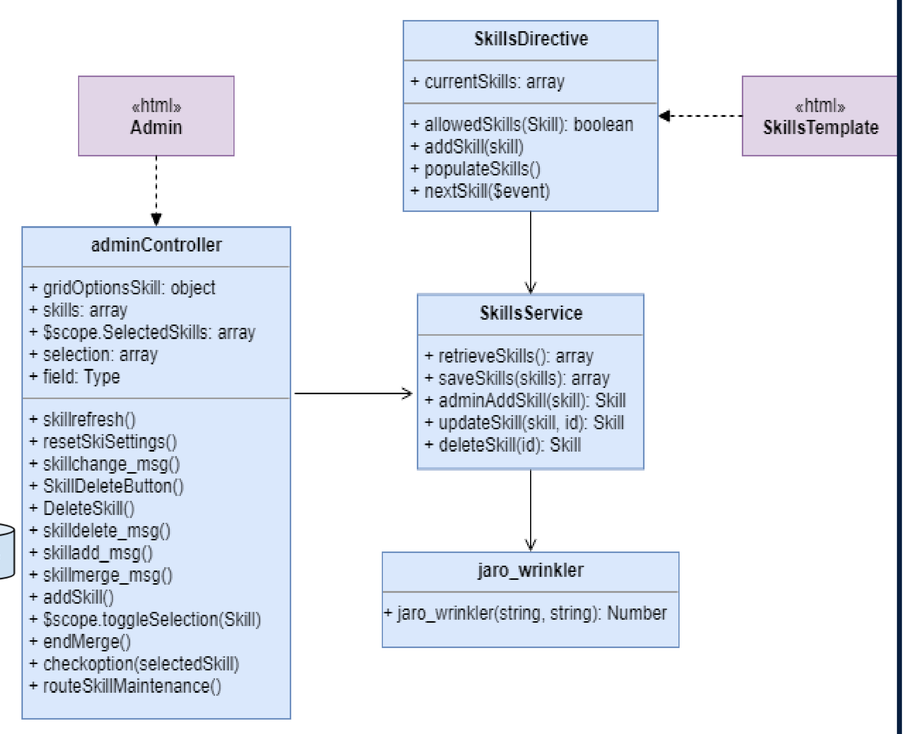
The system uses (M)ongoDB, (E)xpress, (A)ngularJS, and (N)ode, forming the famous MEAN stack.
The admin panel (right) loads all skills when the page is loaded, then an admin is allowed to add, delete, edit, and merge skills.

The Skill routing (left) pulls skills when the template is loaded and saves then after skills are submitted to the system.

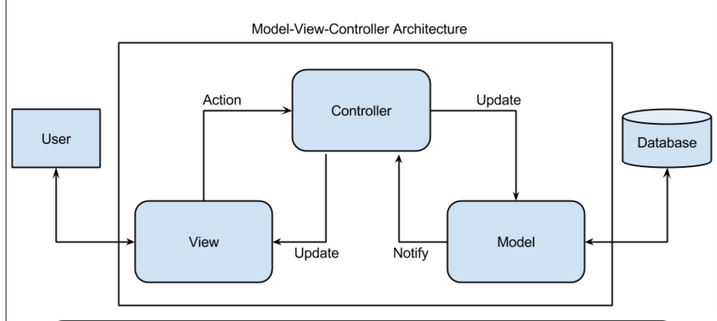


Object Design

Here is the detailed class design for all systems involved with Skill objects. The admin controller allows an admin to edit skills while the skills directive allows users to view skills.

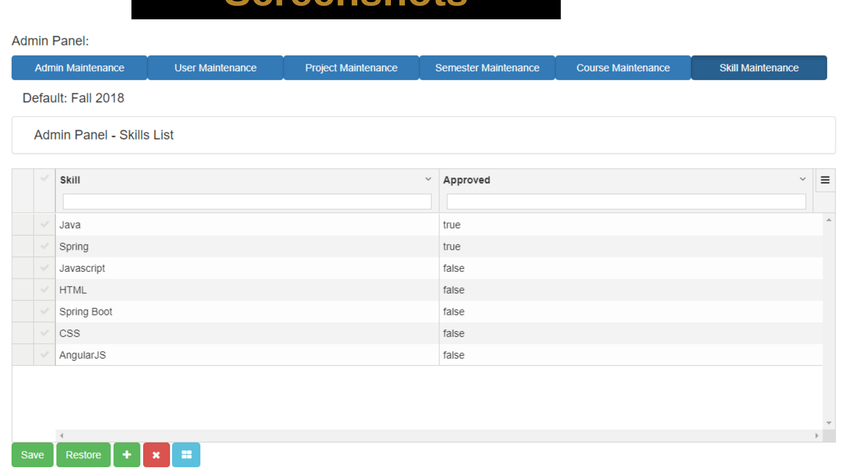


System Design

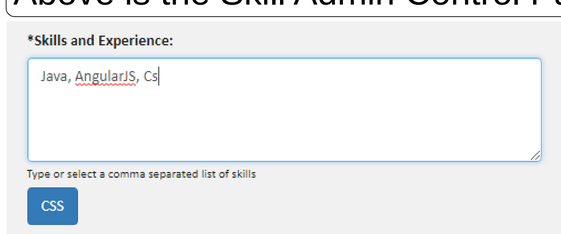


The system runs using the Model, Controller, View Architecture, or MVC for short.

Screenshots



Above is the Skill Admin Control Panel



Above is the Skill form for Users (with autofill button showing)

Summary

- VIP 9.0 system allows users to choose from a list of skills that is displayed cleanly
- Admins can review all skills currently in the system
- Admins can add, edit, delete, and merge groups of skills
- New storage for Skill objects allows for more powerful functionality in later versions

Acknowledgement

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