

# Jabulani School Simulation Portal

**Client -** Gretchen McAllister, NAU Associate Professor Karsten Nguyen - Team Leader, Recorder, and Coder Carli Martinez - Architect and Coder Jasmine Mitchell - Customer Communicator and Coder Ruben Rincon - Release Manager and Coder **Faculty Mentor -** Ana Steinmacher

#### Problem



#### The Value of Classroom Diversity

• Diverse classrooms of students means recognizing that everybody is unique in their own way.

#### **Creativity and Confidence**

- Studies show that students can go further and concentrate better with people of different backgrounds working in the same environment.
- Diversity training for teachers in training exists, but is flawed and can be improved upon in several areas.

# Our Sponsor

Gretchen McAllister, Ph.D.

NAU College of Education Associate Professor

#### Jabulani School District

Jabulani Elementary School | Jabulani High

Elementary Lounge | High School Lounge

Welcome to Jabulani!

This page is the starting point for information about the District and about each of our schools. Jabulani Elementary and Jabulani High School, Explore our District site!

Jabulani High Students Pack \* **New Computer Lab** 

Visit our schools.

Click on the buttons below to go to each school web site.

> Jabulani Elementary

Teaching at Jabulani

Interested in teaching at one of the Jabulani Schools? Click on either of the Application links below to fill out an online application to teach at \* programs installed on every our district.

**Elementary Application** 

**High School Application** 

You will be notified of your status by e-mail.

 Thanks to a federal grant, Jabulani High School opened a new computer lab last month. Students are flocking to the lab to use the latest multi-media software machine.

The new lab is also open on week-ends to provide hands-· on access to students without home computers.

Jabulani High School

**Report Cards** 

Find out how we're doing. Click on the link below to view our School Report Cards.

**Elementary School** 

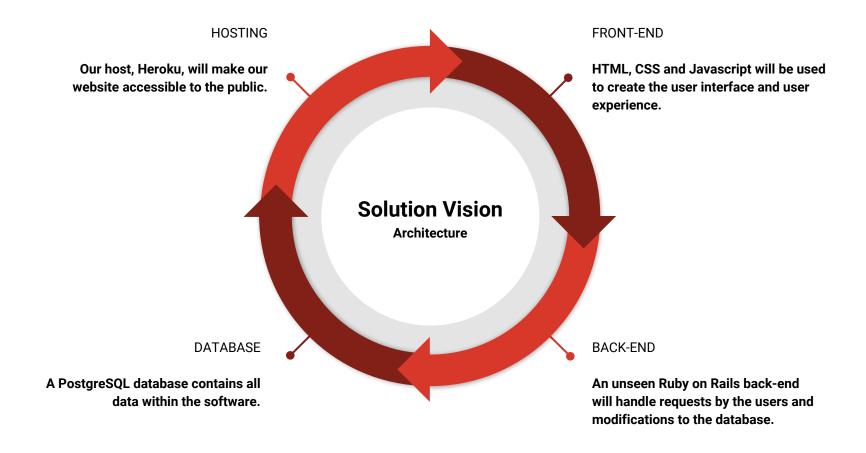
**High School** 

#### Solution

#### **Jabulani School Simulation Portal (JASS)**

- Simulated, virtual experience of diverse classrooms to prepare teachers
  for the real world
- More targeted approach than other simulation softwares for teachers in training





# Functional Requirements

- FR1 Administrator vs. Teacher-in-training features
- FR2 Secure login authentication
- FR3 Virtual classrooms
- FR4 Interactive database
- FR5 Scenario use/creation

# Functional Requirements (cont'd)

- Create virtual classrooms and populate with virtual students
  - Handpicked or predefined student sets
  - Assign classrooms to teachers-in-training
- Ability to create, share, and assign scenarios
  - View class's student data and make scenario
  - Share out-of-class scenarios.

## Non-functional Requirements

- Accessibility for varying forms of colorblindness
- Focus on UI/UX design
- Reliability in terms of hosting
- Maintainability for future refinement



### Risks/Obstacles

• Transferring 600 student profiles from a spreadsheet into an online database

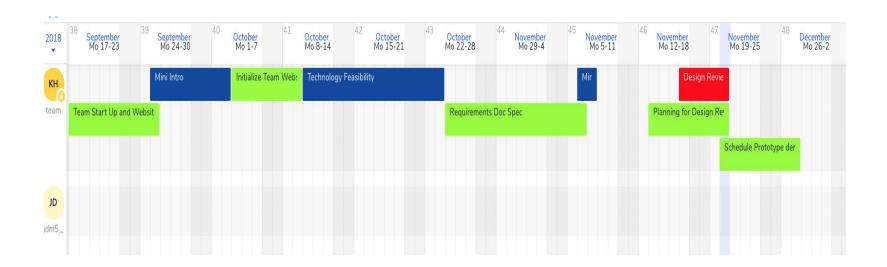
• Having our software be accessible by users with disabilities

Meeting our client's vision of UX and UI

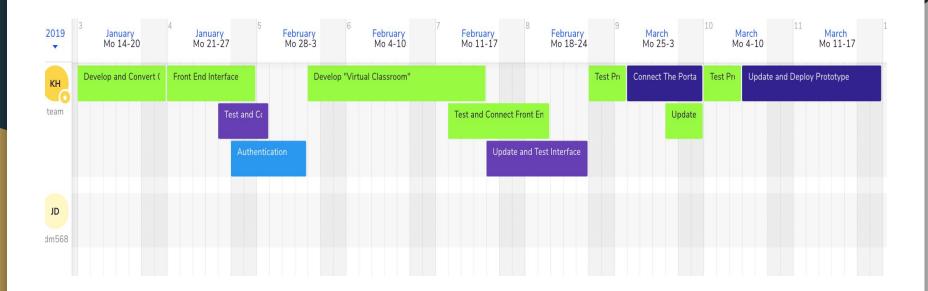
• Avoiding "automation" of scenarios



# Fall Project Schedule



# Spring Project Schedule



#### Conclusion



# Team Jasper

Contact Information: khn6@nau.edu

