

DESIGN DOCUMENT

Rowan University

Senior Project

Professor Baliga

Prepared by Timothy McClintock

Contributions by Roger Morris, Krunal Patel, Dharmyk Pandya &
Yousuf Ahmed

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Webpages

Name **Main**

Description

This page will be the first page a user will see after accessing our website through the URL. It will contain a navigation bar. The page will contain a box with three buttons: Login, Faculty Sign Up and Student Sign Up.

Navigation

To: Student Sign Up Page, Faculty Sign Up Page, Login Page, About Us Page, Contact Us Page.

From: Main page.

End-Points

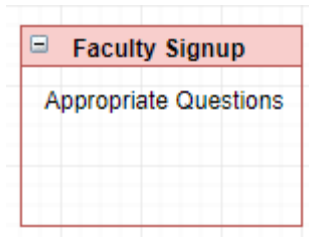
No change in endpoints.

Name **Faculty Sign Up**

Description

This page will have appropriate questions for faculty member to sign them up as a faculty.

Picture



Navigation

To: Faculty Welcome Page

From: Main Page

End-Points

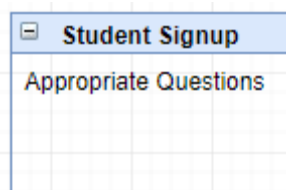
The Data Table 'faculty' in the database containing Faculty Member information will get updated every time a Faculty Member registers with the website by Signing Up.

Name **Student Sign Up**

Description

This page will have appropriate fields for Students to Sign Up.

Picture



Navigation

To: Student Welcome Page

From: Main Page

End-Points

The Data Table 'students' in database containing Student member information will get updated every time a Student registers with the website by Signing Up.

Name **Login**

Description

This page will ask the user (Student or Faculty) to enter their login credentials.

Navigation

To: Student Welcome OR Faculty Welcome

From: Main

End-Points

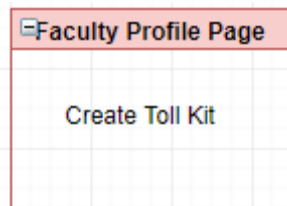
The Data Table 'users' for the User Credentials (username and password) will get used to verify the user's credential by comparison.

Name: **Faculty Profile**

Description

This page will allow a registered faculty member to customize their profile with basic personal information. This page can also enable the faculty member to add a link to their personal website, make a toolkit with tools made available to them, and set the visibility of their tools to private or public.

Picture



Navigation

To: Faculty Welcome

From: Faculty Sign Up, Login, Faculty Welcome

End-Points

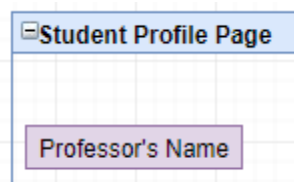
The Data Table 'facultysettings' in the database will add a Faculty Member's personal information and may also link the data table information to the personal website.

Name **Student Profile**

Description

This page will enable a registered Student access to their account.

Picture



Navigation

To: Student Welcome

From: Student Sign Up, Login, Student Welcome

End-Points

The Data Table 'studentsettings' in database will add a Student's personal information and may also link the data table information to the personal website.

Name **Faculty Welcome**

Description

This page will enable the registered Faculty Member, access to their account.

Navigation

To: Faculty Profile, Login, Tools

From: Faculty Sign Up, Login, Faculty Profile, Tools

End-Points

No change in endpoints.

Name **Student Welcome**

Description

This page will enable a registered Student access to their account.

Navigation

To: Student Profile, Login, Tools

From: Student Sign Up, Login, Student Profile, Tools

End-Points

No change in endpoints.

Name **Faculty Tools**

Description

This page is an abstract place holder page for 1..N number of Faculty Member tools. This toolkit will be dynamically adjustable and could contain any number of pages as desired by the user.

Picture

Toll Kit	
Tool 1	Tool 1
Tool 2	Tool 2
Tool 3	Tool 3

Navigation

To: Faculty Welcome, Login, Faculty Profile

From: Faculty Welcome

End-Points:

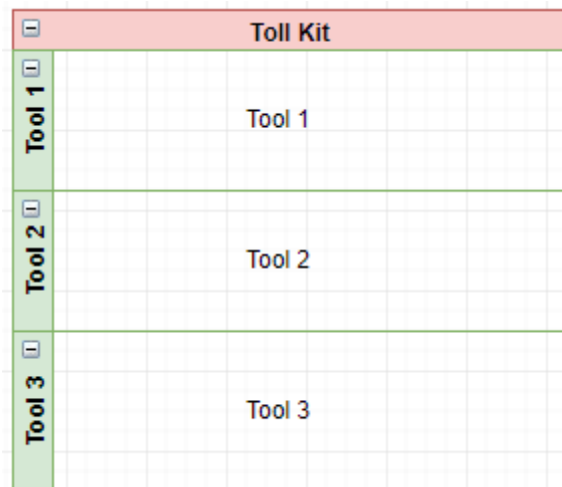
The Data Table 'facultytools' in the database will add a Faculty Member's Tool and may also link the data table information to the Faculty Welcome Page.

Name **Student Tools**

Description

This page is an abstract place holder page for 1..N number of Students' tools. This toolkit will be dynamically adjustable and could contain any number of pages as desired by the user.

Picture



Toll Kit	
Tool 1	Tool 1
Tool 2	Tool 2
Tool 3	Tool 3

Navigation

To: Student Welcome, Login, Student Profile

From: Student Welcome

End-Points

The Data Table 'studenttools' in the database will add a Students Tool and may also link the data table information to the Student Welcome Page.

Structure

Stack

Operating Environment
Microsoft x86

Server
Apache/AWS

Database
MySQL

Code
PHP

Scheme

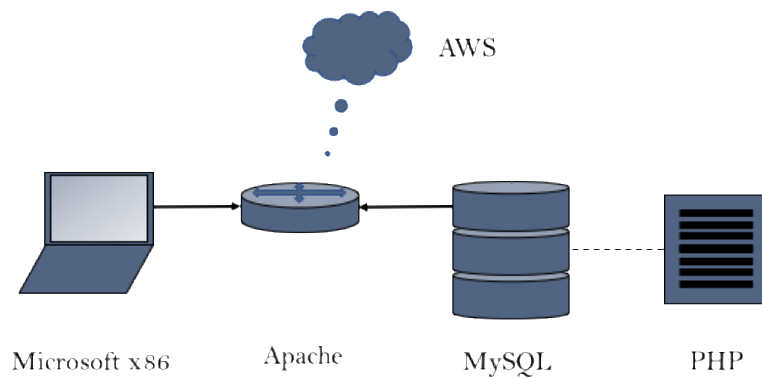


Figure 1. Full Stack Architecture Scheme

Development Tools

Repository
GitHub

Web Page Resources
Bootstrap

Site Map

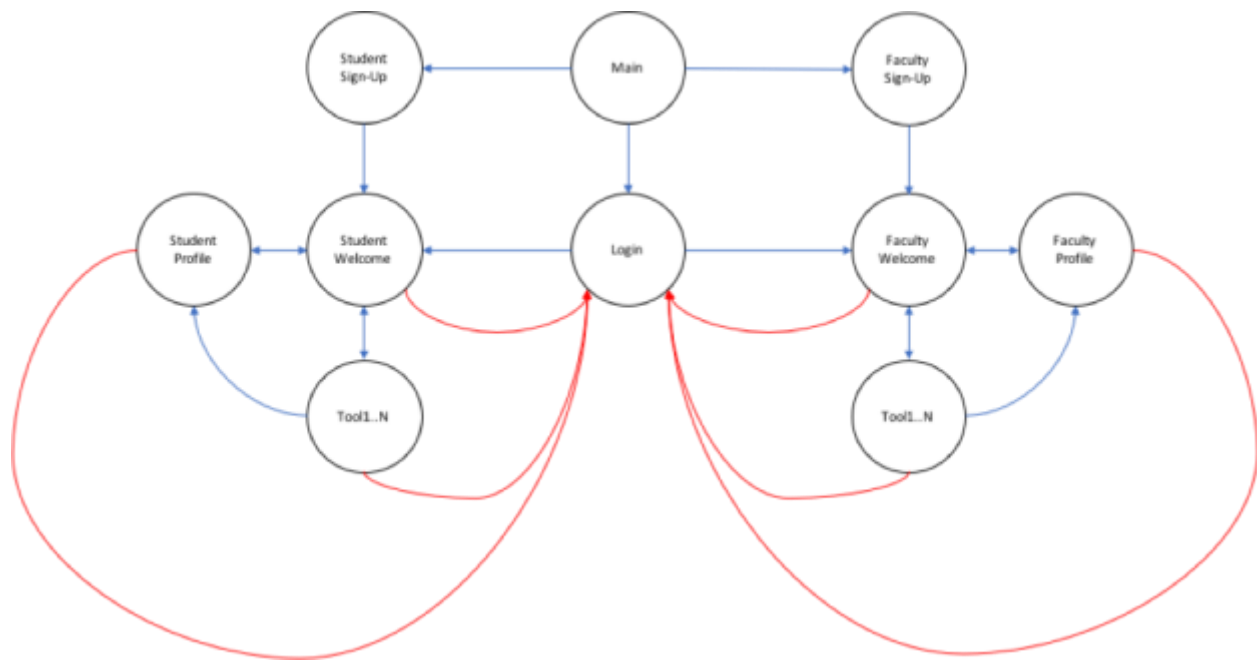


Figure 2. Site Map

Definitions

User

A user is defined as any entity that can create an account. A user is exclusively required to have an '.edu' email account to register. As it pertains to this database a user will be defined as either a Student or Faculty. A University entity is associated to a Faculty member of the University once the Faculty member registers. A Student can only create an account if their University is registered in the database. The Faculty and Student Entities will all be linked to a Toolkit Entity.

Faculty

A Faculty Entity has the following unique attributes: ID/Primary Key, Username and Email. A Faculty user also has DOB (date of birth), University Name, Name, Password, Role, and Gender. Each attribute has the following datatypes: ID/Primary Key: INT, Username: VARCHAR (100), Email: VARCHAR (100), DOB: DATE, University Name: VARCHAR (100), Name: VARCHAR (100), Password: VARCHAR (100), Role: VARCHAR (15), and Gender: VARCHAR (15). A Faculty and University account will be created simultaneously if the University is not in the database. The Faculty Toolkit is created with the account. The Toolkit will initially be empty/NULL. The Faculty is responsible for populating the Toolkit.

Student

A Student entity has the following unique attributes: ID/Primary Key, Username and Email. A Student user also has DOB (date of birth), University Name, Name, Password, Role, and Gender. Each attribute has the following datatypes: ID/Primary Key: INT, Username: VARCHAR (100), Email: VARCHAR (100), DOB: DATE, University Name: VARCHAR (100), Name: VARCHAR (100), Password: VARCHAR (100), Role: VARCHAR (15), and Gender: VARCHAR (15). A Student account can only be created if the Student's university is in the database. A Toolkit is created along with the Student account. The Toolkit will initially be empty/NULL. The Student is responsible for populating the Toolkit.

Toolkit

The Toolkit entity is utilized by all other entities. The Toolkit has the following attributes: ID/Primary Key (ID/Primary Key from other entities), Name, URL, and Category. Each attribute has the following datatypes: ID/Primary: INT, Name: VARCHAR (100), URL: VARCHAR (100) and Category: VARCHAR (100). The ID/Primary Key of each of the other entities is used to store each entity's tools.

University

A University entity has the following unique attributes: ID/Primary Key and University Name. Each attribute has the following datatypes: ID/Primary Key: INT and University Name: VARCHAR (100). A University and its Toolkit are also created by the Faculty. The Faculty is responsible for populating the university's Toolkit.

Entity Relationship Diagram 1.

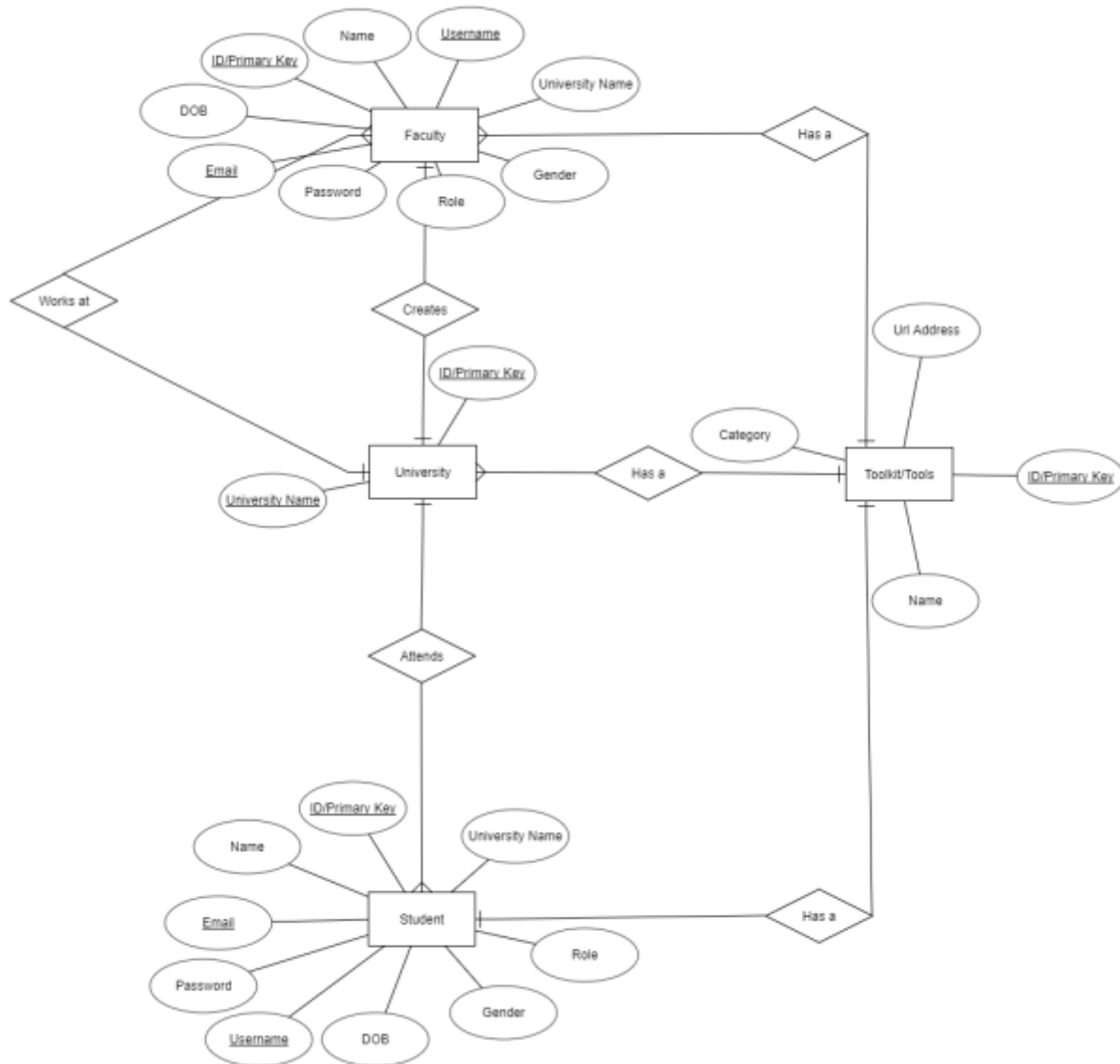


Figure 3. Entity Relationship Diagram

Entity Relationship Diagram 2.

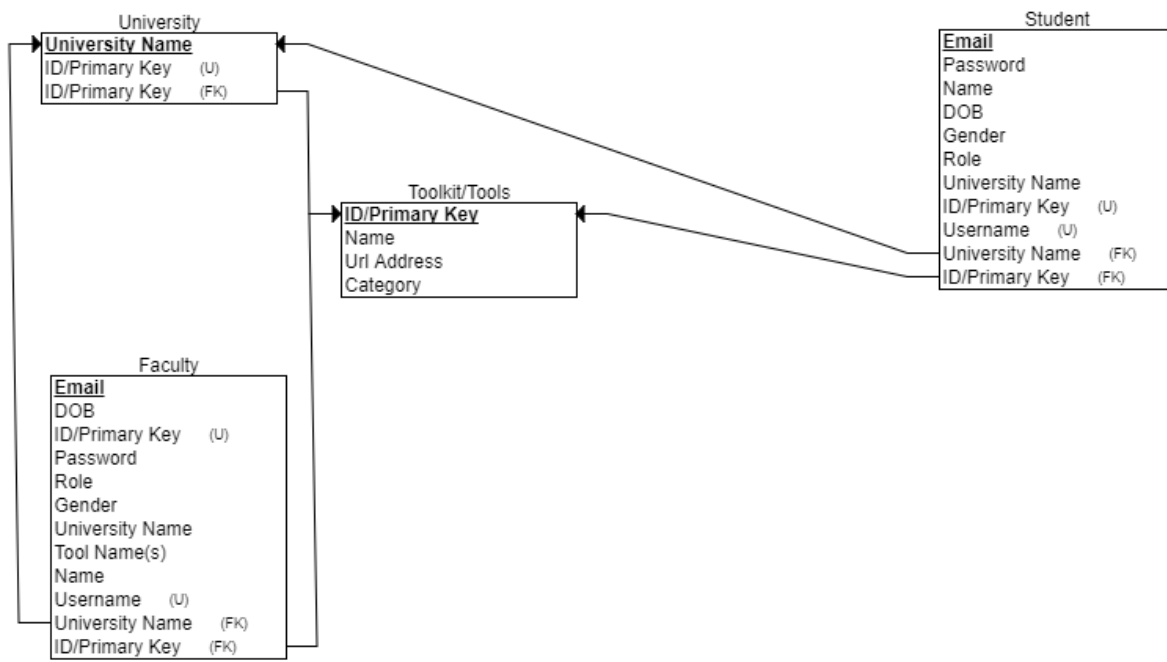


Figure 4. Entity Relationship Diagram

Tables

Layout

<i>Name</i>	<i>Columns</i>	<i>Purpose</i>
faculty	10	Store Faculty credentials
students	9	Store Student credentials
users	9	Store/Merge User Data
toolkit	3	Hierarchical superclass
facultytools	7	Store Faculty Tool Data
studenttools	7	Store Student Tool Data
facultysettings	10	Store Faculty Personal Data
studentsettings	9	Store Student Personal Data

Table Diagram

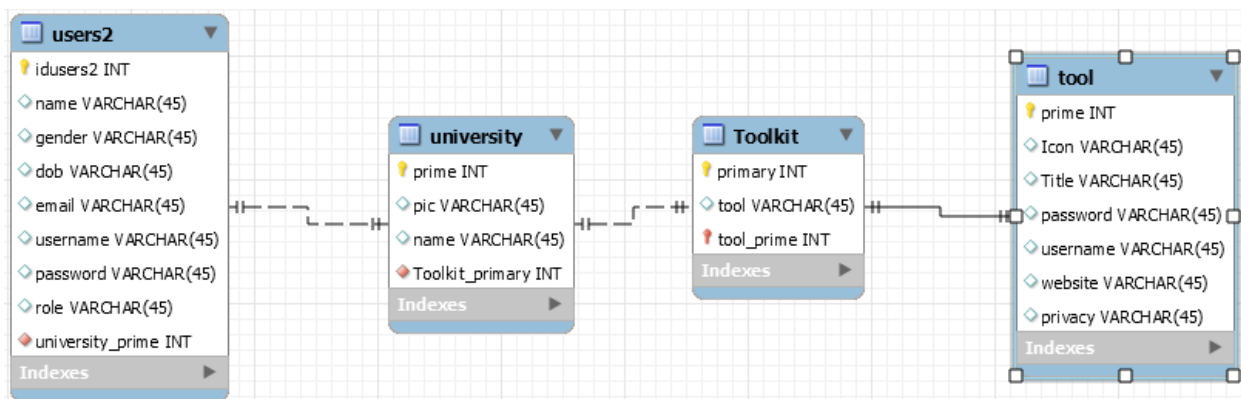


Figure 5. Example of Table Interactions for the Toolkit abstraction