College Event Website

BY: GROUP 15

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Overview

- The college event website allows students to view events.
- Students can view events at their university location.
- Students can also view events at other university locations.
- Students can request to create an RSO group or request to follow another RSO group.
- They are also allowed to view RSO events based on the RSO group they are following.

Levels of Access

Super Admin

- One superadmin per university.
- Creates/Owns a university profile (ex. UCF)
- Designates admins for that university (≥ 5)
- Approves events create by an admin.

Administrator

- Multiple administrators per university (≥ 5)
- Creates events
- Owns multiple RSO's

Student

- View/Join Events
- Create/Join RSO
- Comment/Rate Events

Front End Development

- HTML5
- CSS3
- JavaScript
- Bootstrap
- JQuery

Backend Development

- Languages : Java
- Database : MariaDB
- Everything Else : Java Libraries

Java Libraries

- Jetty - a Java HTTP Web server and Java Servlet container.
- JDBI - an SQL convenience library for Java.
- HikariCP - is a “zero-overhead” production-quality connection pool.
- Google Guava - open-source set of common libraries for Java.
- Google GSON - an open source Java library to serialize and deserialize Java objects to (and from) JSON.
- JSoup - is a Java library for working with real-world HTML. It provides a very convenient API for extracting and manipulating data, using the best of DOM, CSS, and jQuery-like methods.

Database Structure

```
CREATE TABLE `student` (
  `sid`      INT          NOT NULL AUTO_INCREMENT,
  `uid`      INT          NOT NULL,
  `username` VARCHAR(100) NOT NULL,
  `email`    VARCHAR(100) NOT NULL,
  `password` VARCHAR(36)  NOT NULL,
  `salt`     VARCHAR(12)  NOT NULL,
  `created`  TIMESTAMP    NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  PRIMARY KEY (`sid`)
);
```

```
CREATE TABLE `university` (
  `uid`       INT          NOT NULL AUTO_INCREMENT,
  `name`      VARCHAR(100) NOT NULL,
  `domain`    VARCHAR(100) NOT NULL,
  `sid`       INT          NOT NULL,
  `created`   TIMESTAMP    NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  `latitude`  DOUBLE       NOT NULL DEFAULT 0,
  `longitude` DOUBLE       NOT NULL DEFAULT 0,
  `motto`     VARCHAR(100),
  `desc`      TEXT,
  `image`     TEXT,
  PRIMARY KEY (`uid`)
);
```

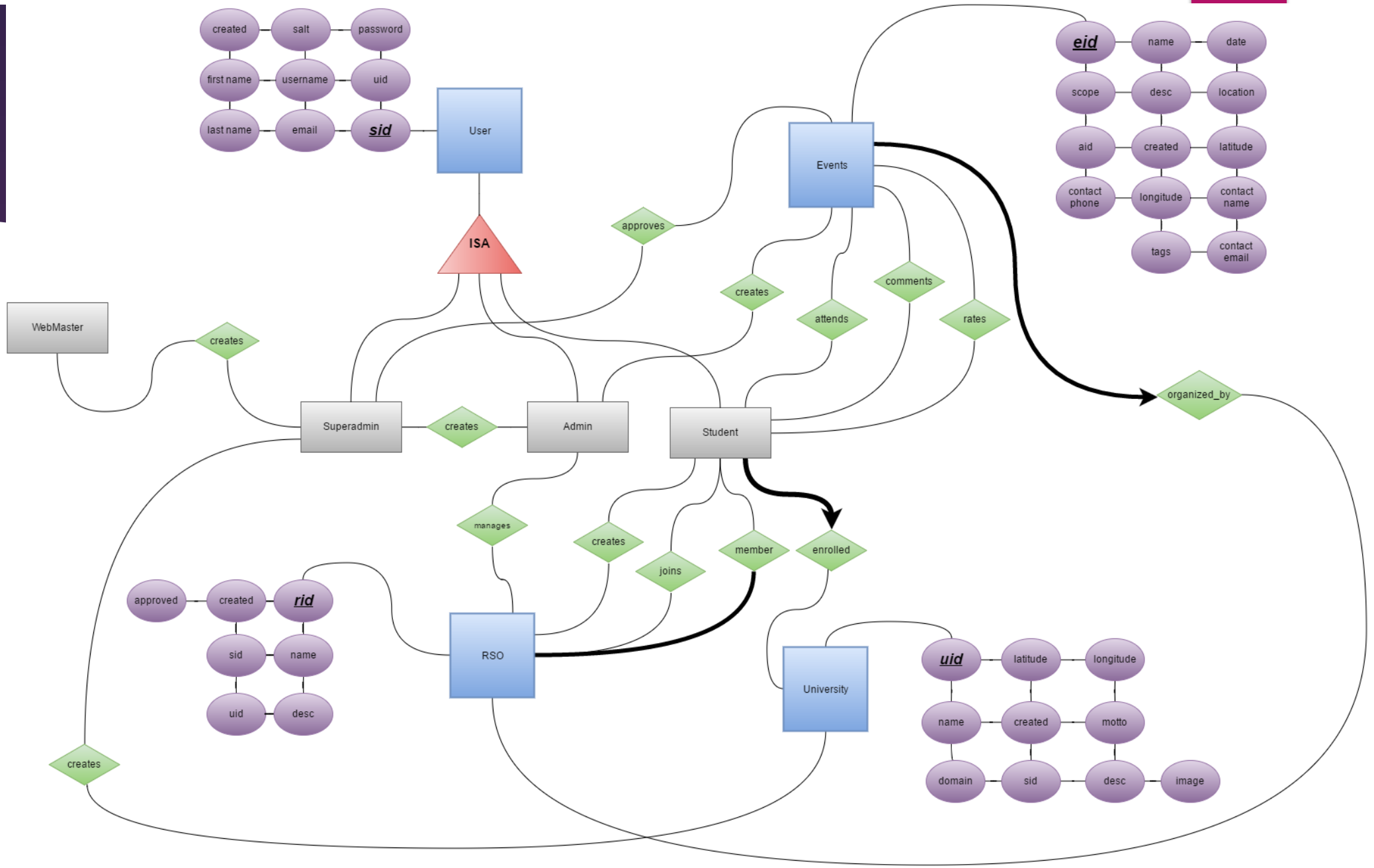
Database Structure - Continued

```
CREATE TABLE `events` (
  `eid`          INT          NOT NULL AUTO_INCREMENT,
  `scope`        TINYINT      NOT NULL DEFAULT 1,
  `aid`          INT          NOT NULL DEFAULT 0,
  `name`         VARCHAR(100) NOT NULL,
  `desc`         TEXT         NOT NULL,
  `created`      TIMESTAMP    NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  `date`         TIMESTAMP    NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  `location`     VARCHAR(100) NOT NULL,
  `latitude`     DOUBLE       NOT NULL DEFAULT 0,
  `longitude`    DOUBLE       NOT NULL DEFAULT 0,
  `contactname`  VARCHAR(100),
  `contactphone` VARCHAR(16),
  `contactemail` VARCHAR(100),
  `tags`         TEXT,
  PRIMARY KEY (`eid`)
);
```

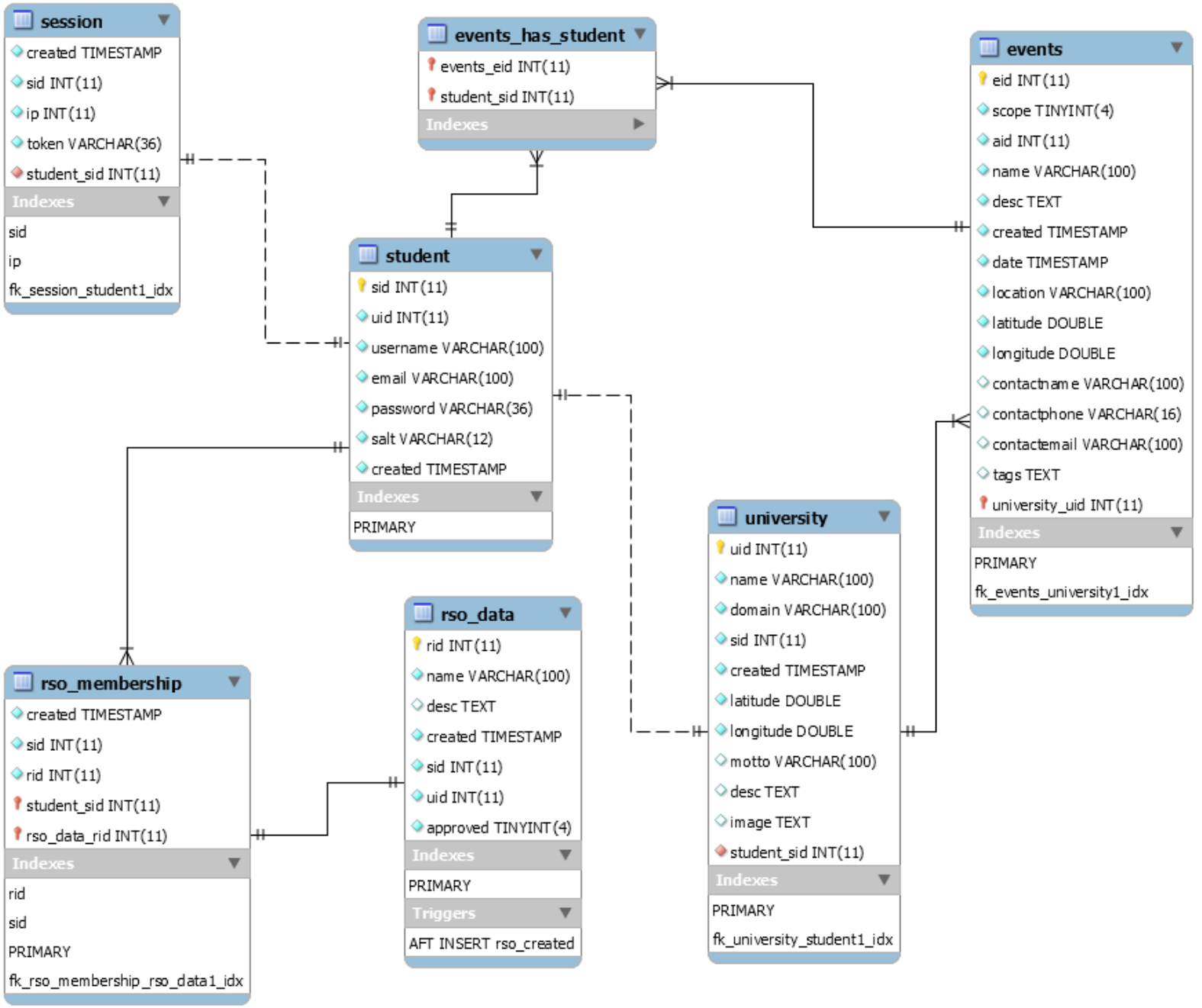
```
CREATE TABLE `rso_data` (
  `rid`      INT          NOT NULL AUTO_INCREMENT,
  `name`     VARCHAR(100) NOT NULL,
  `desc`     TEXT,
  `created`  TIMESTAMP    NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  `sid`      INT          NOT NULL,
  `uid`      INT          NOT NULL,
  `approved` TINYINT      NOT NULL DEFAULT 0,
  PRIMARY KEY (`rid`)
);
```

```
CREATE TABLE `rso_membership` (
  `created` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP(),
  `sid`     INT       NOT NULL,
  `rid`     INT       NOT NULL,
  KEY (`rid`),
  KEY (`sid`)
);
```

ER Model


created
salt
password
first name
username
uid
last name
email
sid
User
ISA
approves
Events
eid
name
date
scope
desc
location
aid
created
latitude
contact phone
longitude
contact name
tags
contact email
creates
comments
attends
rates
WebMaster
creates
Superadmin
creates
Admin
Student
organized_by
manages
creates
joins
member
enrolled
approved
created
rid
sid
name
uid
desc
RSO
University
uid
latitude
longitude
name
created
motto
domain
sid
desc
image
creates

Relational Model



Improvements

- Gradually enhance the user interface.
- Integrate more social networking features within the application.
- Test for stability issues.