Student Abroad Peer Advising

CEN3031

UNIVERSITY
SAPA
study abroad peer advisors
of
FLORIDA

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Thank you for sponsoring a project with

University of Florida CEN 3031 Introduction to Software Development.

For more info on this course, please contact Dr. Philippa R. Brown philippa.brown@ufl.edu

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1. Product Overview

1.1 *Brief Description of the Project:*

The *Study Abroad Peer Advisor* (SAPA) organization is a group of students who have previously studied abroad and are now dedicated to sharing their experiences with other students. SAPA assist students interested in learning more about UF's study abroad opportunities by matching them with students who have studied on similar programs/locations, or who share similar academic interests. The SAPA's online website seeks to provide a more manageable method of keeping track of members' points, information, and of community events than current Excel spreadsheets. The implementation of CRUD (create, remove, update, and delete) of any database (db) management system (mLab is currently active) allows signed-in Members to view upcoming events and manage their profile while Administrators will be able to create events and contact the members. Through the project's development, we were exposed to agile development and able to strengthen our group skills (communication, teamwork, leadership, etc.) which is a valuable factor when working the software development industry.

1.2 *Major Features Proposed & Completed*

Description of prioritized features for this development effort:

Our team decided that the following features are to be prioritized: Logging-In, Member Page, Member Biography, and Event Page. We had our database store the user's login information to the site.

Non-Member users will be able to immediately view or search for the contact and office hours of members upon accessing the website. Members will be able to login to change their profile information and sign up for events. Administrators can create or remove members as well as events, able to send out emails about events or updates to all members, and view the points accumulation.

Proposed	Completed
- A login feature with separate access level for members and administrators.	- ✓
- Admin should have access to “Admin Panel” in which he can modify the Members and Events (CRUD). - Connect Member and Event Page to a DB for live CRUD usage. - Admin should be able to email all members about an update or event.	- ✓ - ✓ - ✓
- A user should see a consistent CSS navigation bar and styling throughout the website	- ✓
- Members should be able to sign up for events, let the admin know they are attending and earn points. - Members can to log into their profile to change their bio, office hours and see their total points.	- ✓ - ✓
- Use sign up genius for API so Members can sign up for time slots.	- □
- Non-Members can only view information of current Members’ office hours and contact. - Non-Members can fill out an application to apply to UF SAPA.	- ✓ - □

1.3 ***Links to Useful Project Information:***

Live Web Application URL: https://team-sapa-web-app.herokuapp.com/

GitHub (Code Repository): https://github.com/team-sapa/web-app

Web Application Admin Information:

- ***User Login:*** **admin**
- ***Password:*** **admin**

Web Server Hosting Provider: Heroku → https://www.heroku.com/

- ***Admin Username:*** **nruspantini@ufl.edu**
- ***Password:*** **cR::L95MxUpX3fp**

Document or Image Storage Provider:

MLAB (Document)

- **Username: nicholasruspantini**
- **Password: x9S2W4AmhRNdpPL**
- **Database: sapa**
- **Connection Url: mongodb://nick:nicknick123@ds113580.mlab.com:13580/sapa**

CLOUDINARY (Image)

- **Username: nickr1196@gmail.com**
- **Password: teamSAPA2!**

JWT

- **Secret: "supersecretmessage"**

Wireframes (Visual Low-fidelity Mock-ups of Web Application):
https://balsamiq.cloud/s9v44o0/pmzrcmh/r7E24

Pivotal Tracker link: https://www.pivotaltracker.com/n/projects/2310260

2. Product Planning

2.1 *About the User Stories Creation Process:*

After talking to our client, we got a clear idea of our client's goals and expectations. Our client wants a solution to manage the various excels documents of members' information and events on a single site. The web application is not limited to creating a portal on which the non-members can come to view the information of members (ex: office hours, location), but also include member and administrator pages. The member page allows registered login members to write, view, or update their profile information while the administrator page to manage events and create other users with varying degrees of freedom and permissions. A event page is created to view and opt into events as members while administrators can create, edit, view registration, and close those events.

The client also asked for us to help him manage the attentions points of his members and to be able to send an email message of events or important updates to all members. In an essence, this will create a online member profile and attendance record to reduce the numbers of excel documents currently being used as saved storage. Our web applications will not be integrating the Sign-Up Genius API as requested by the client.

The client's goals and expectations include:

- Home pages
  - Non-Members can view the information of members, the organization, and contact information.
- Member Page
  - Each member has a personal profile with info about their experience (picture in profile)
  - Each member has a Member: points, events, office hours, email, program major
  - Members have the ability to change their information.
- Administrator page
  - Add, delete, and modify current permission of users/members.
  - Change view the members' points.
  - Send emails to all members.
- Event page
  - As member, can view and sign up for events.
  - As administrator, can create/change events.

User stories are created by the team and were created based off the client's own goals. The client gave us the current site in use as a example template and demonstrated the features he would like to be implemented. The planning sprint is done as we work on dividing tasks and setting up before beginning the process of creating for the web application

2.2 *About the Wireframes Creation Process:*

Wireframes[1] are team created. The client provided his current site, as an example template and not a constraint on design, with the list of features he would like for us to do and the group design

[1] Refer to the wireframes link at https://balsamiq.cloud/s9v44o0/pmzrcmh/r7E24

the wireframe as based on the feature to be implemented. Wireframes are created by the members responsible to their feature.

3. Technical Specifications

MEAN.JS Development Technology Stack:

This web application was built using MEAN.js Version ***0.4.2*** <http://meanjs.org> which uses Node.js Version ***6.9.2***, Express Version ***4.15.4***, Angular Command Line Interface (CLI) Version ***1.3.2***, and Angular Development Kit Version ***0.0.13***.

We cloned the repository to GitHub Organization "team-sapa" and Project "web-app".[2]

Modules Developed for this project:

Whole Team || Master || https://bit.ly/2Dp17ns

Whole Team || Client || https://bit.ly/2XoOeRY

Whole Team || Server || https://bit.ly/2vbJQc

Johnny || README.md || https://bit.ly/2Dw4SYh

Johnny || FinalDocumentation || https://bit.ly/2UE3oku

Johnny || Images || https://bit.ly/2GFkv1G

Johnny || Bugs || https://bit.ly/2GFclpR

Johnny || Member Page || https://bit.ly/2XBhR2n

Nick Ruspantini || Tests || https://bit.ly/2ZvWPE7

Nick || Register || https://bit.ly/2VpD0z2

Nick || Login || https://bit.ly/2ZtqBcL

Nick || Edit Profile || https://bit.ly/2GsRNQ3

Nick || Profile || https://bit.ly/2GAAa2a

Nick || Members || https://bit.ly/2XBhR2n

Nick || Account || https://bit.ly/2Vk10E0

Ben Anouge || Events Page || https://bit.ly/2USWRaD

Ben || Attendance Page || https://bit.ly/2KYBBLS

Ben || Event Controller (front-end) || https://bit.ly/2ZybVsL

[2] Link: https://github.com/team-sapa/web-app

Ben || Event Controller (back-end) || https://bit.ly/2PrydIc

Ben || Attendance Controller || https://bit.ly/2XzniPw

Kris || Attendance/Routes || https://bit.ly/2KZjR3f

Kris || Events/Routes || https://bit.ly/2VjKeEZ

Kris || Members/Routes || https://bit.ly/2XDOBYW

Kris || Attendance/Schema || https://bit.ly/2LdgZ2X

Kris || Members/Schema || https://bit.ly/2USGB9y

Kris || Events/Schema || https://bit.ly/2viWsyO

Kejti || Page Creation || http://bit.ly/2UWpXpF

Kejti | Page Creation || http://bit.ly/2GvOkjR

Kejti | UI Design || http://bit.ly/2VoJVbZ

Kejti | UI Design || http://bit.ly/2Dxe5Qd

Kejti | UI Design || http://bit.ly/2IVkXKO

Kejti | UI Design || http://bit.ly/2Gv4Lgg

Samuel Cuervo || Points/Page || https://bit.ly/2DuKMxy

Samuel || Points/Function || https://bit.ly/2IH5RJd

Samuel || UI Design || https://bit.ly/2XBhR2n

Samuel || Members/Page || https://bit.ly/2XBhR2n

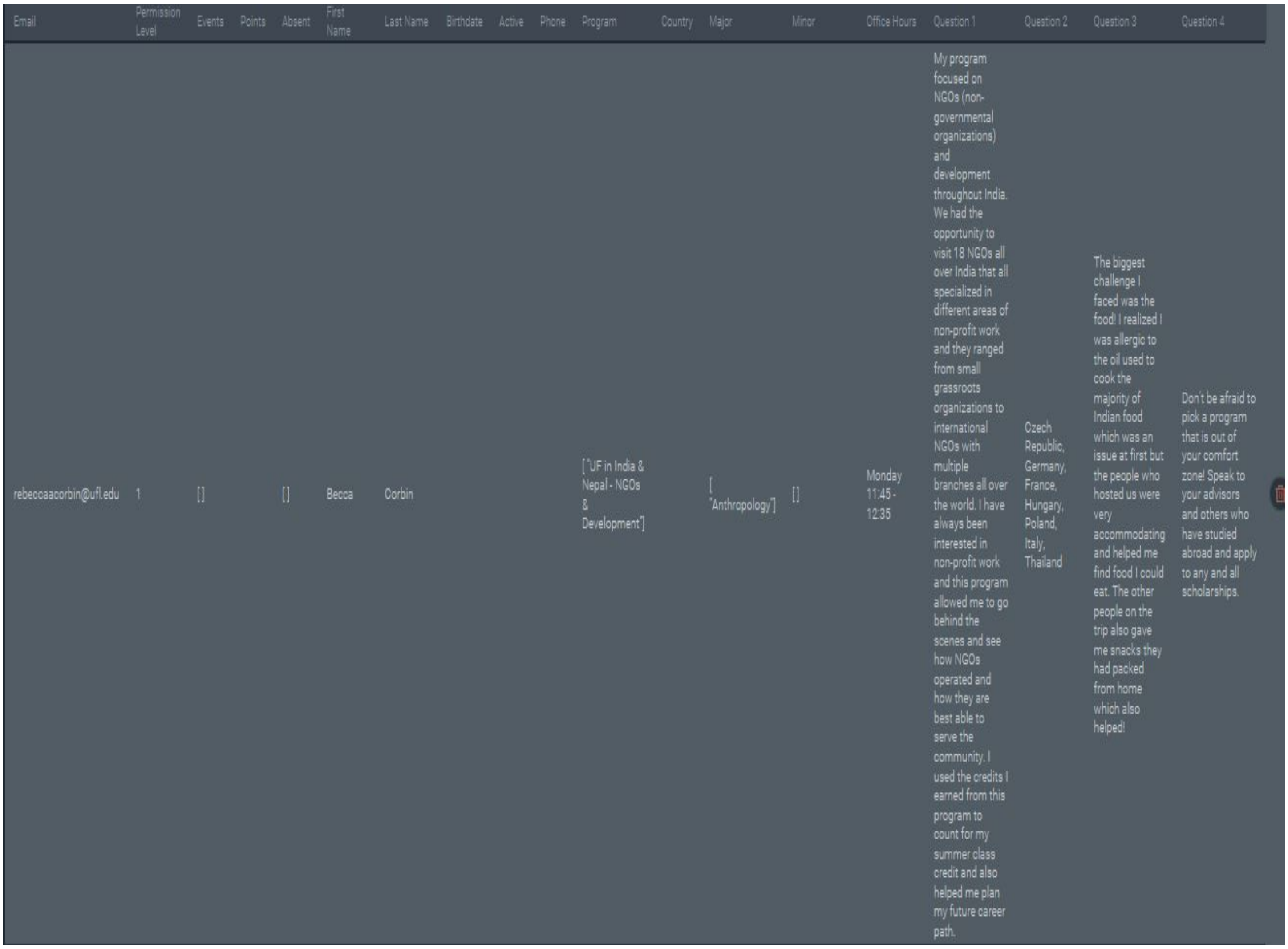
Samuel || UI Design/Styling || https://bit.ly/2ICfOYo

Database:

We utilized mLab (MongoDB) to store the database schemas for the web application. We have developed the following schemas:

1) members/users
   a. The users db is used to store members login information. The password is hashed out to ensure privacy. The schema allows for members to log back in by validating their password against the hashed password in the db. As you see below, our schema has

the following attributes: Password, Username, E-Mail, Permission Level[3], First Name, Last Name, Contact Info[4], and Profile Info[5].



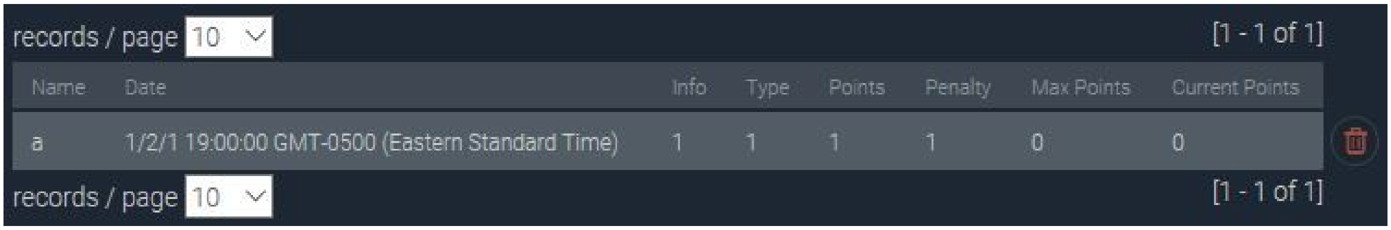
Email	Permission Level	Events	Points	Absent	First Name	Last Name	Birthdate	Active	Phone	Program	Country	Major	Minor	Office Hours	Question 1	Question 2	Question 3	Question 4
rebeccaacorbin@ufl.edu	1	[]		[]	Becca	Corbin				["UF in India & Nepal - NGOs & Development"]		["Anthropology"]	[]	Monday 11:45 - 12:35	My program focused on NGOs (non-governmental organizations) and development throughout India. We had the opportunity to visit 18 NGOs all over India that all specialized in different areas of non-profit work and they ranged from small grassroots organizations to international NGOs with multiple branches all over the world. I have always been interested in non-profit work and this program allowed me to go behind the scenes and see how NGOs operated and how they are best able to serve the community. I used the credits I earned from this program to count for my summer class credit and also helped me plan my future career path.	Czech Republic, Germany, France, Hungary, Poland, Italy, Thailand	The biggest challenge I faced was the food! I realized I was allergic to the oil used to cook the majority of Indian food which was an issue at first but the people who hosted us were very accommodating and helped me find food I could eat. The other people on the trip also gave me snacks they had packed from home which also helped!	Don't be afraid to pick a program that is out of your comfort zone! Speak to your advisors and others who have studied abroad and apply to any and all scholarships.

Figure 1: User Schema

2) events

a. The "events" db is used to store the events to display on the Events Page. It is live (i.e. the change in the db will be reflected on the Event Page after refresh). As you see below, our schema has the following attributes: Event ID, Name, Data, Info, Type, Points, Point Penalty, Max Number of Attendees, and Current Number of Attendees.

[3] The Permission Level is set based on the user type: Non-Members, Members, Administrators.
[4] Contact various sub-variables linked here: https://bit.ly/2vbFT8b
[5] Contact various sub-variables linked here: https://bit.ly/2vbFT8b



records / page 10 [1 - 1 of 1]

Name	Date	Info	Type	Points	Penalty	Max Points	Current Points
a	1/2/1 19:00:00 GMT-0500 (Eastern Standard Time)	1	1	1	1	0	0

records / page 10 [1 - 1 of 1]

Figure 2: Events Schema

3) attendance

a. The "attendance" db is used to store the events attended by the members. The attendance schema has the following attributes: Event ID, User ID, and Present[6].

User Interface Styling (CSS & Bootstrap/other framework):

The web application was styled using CSS v3.

Location of CSS & Styling for this project:

Whole Team || main.css || https://bit.ly/2ICfOYo

4. Deployment Information

4.1 Description of Deployment:

There is two options of deployment: locally or via Heroku. Deploying it locally requires you to pull the latest source code from GitHub then applying "npm start" at the terminal. In contrast, you have to set up a link in Heroku which senses updates to the master branch source code and automatically deploys the latest push.

4.2 Deployment Links:[7]

Live Web Application URL: https://team-sapa-web-app.herokuapp.com/

GitHub (Code Repository): https://github.com/team-sapa/web-app

***Web Server Hosting Provider*:** Heroku → https://www.heroku.com/

- ***Admin Username:* nruspantini@ufl.edu**
- ***Password:* cR::L95MxUpX3fp**

[6] Boolean value where true = present and false = absent.

[7] Note: Information is repetitive to catch the client's eyes

API Keys: Refer to: https://docs.google.com/document/d/1oPQybo0YDR5iUvGLaPufS1Oo4-CYUQcL2h7ccumisbA/edit?usp=sharing

4.3 *General Instructions for your deployment:*

Your web app is deployed via the Terminal (i.e. Command Prompt and PowerShell).

Use the "Master" branch in the GitHub Repository which contain everything needed for the web application to function. The master had the source code thoroughly tested and has some guarantee durability (i.e. code won't break when a user is interacting with the user interface [UI]).

If you have someone (or group) who will continue development, then they should follow the above describe structure as we found it to be very successful.

Database:

We are using a MongoDB for your web app. It is located at https://mlab.com/home. Your capacity is ***0.5GB*** and you are currently using ***4.16MB***. This is the complementary (free) package.

Login Information:

- **Username: nicholasruspantini**
- **Password: x9S2W4AmhRNdpPL**

If you want to change your database username and password, visit https://mlab.com/user?username=nicholasruspantini.

If you want to review your account visit https://mlab.com/account-details/.

The current connection ***DB URI*** is:

"mongodb://<dbuser>:<dbpassword>@ds113580.mlab.com:13580/sapa"[8].

If you want to change out your database, you will need to set "***<dbuser>***" with "" and <**dbpassword**>" with "".

You can update this value in your web app in the folder ".env"[9] and file "server.js".

File Storage and Sign Up Genius API:

We currently aren't implementing this.

[8] <dbuser> and <dbpassword> is unique for each deployment.

[9] Refer to for .env: https://bit.ly/2UNN0mr

Web Application:

Admin Login Information:

- ***User Login:*** admin
- ***Password:*** admin

5. Testing Information

5.1 Description of Testing including Manual & Automated Tests:

Our goal in testing this web application was to cover all the expected user interactions with the main features developed for the project by the development team.

Highly Tested Features	Still in Need of Extensive Testing
- Members and Events Model. - Email all members. - Get route for the pages. - Create, Viewing, and Editing Events.	- Front-End Testing - Back-End Testing

5.2 Description of Test:

We have completed back-end unit testing for the Member Model here: https://github.com/team-sapa/web-app/tree/master/Testing/Tests

Known Front-End Bugs:

Link to known issues:

https://github.com/team-sapa/web-app/blob/master/Testing/Bugs/Front%20Bugs.txt

Known Back-End Bugs:

Link to known issues:

https://github.com/team-sapa/web-app/blob/master/Testing/Bugs/Back%20Bugs.txt

6. Product & Feature Screenshots

User Features: Please refer to:

https://docs.google.com/document/d/1BKLVAmG3jHszrpQXvM7OeRnG2sNqco2WL64TZv5_f6o/edit?usp=sharing

Admin Features: Please refer to:

https://docs.google.com/document/d/1e_fieCoJr5LyCk6t3-RyIHBf-EQvxv3_KNWiyZe1GVY/edit?usp=sharing

7. Supplemental Documents

Link to group’s Google Document (GD):

https://docs.google.com/document/d/1fN6kEATcDluTSjfDpQ6eonLyYmNQHd8L59OSz-DiQ_8/edit?usp=sharing