**OwlVision**

Executive Summary

OwlVision is a next-generation, campus-centric web application which aims to centralize the most important information relevant to students at FAU in order to aid in their academic studies, while at the same time giving them a voice to notify school officials of potential hazards and dangers on campus. We have all experienced the staunch resistance of bureaucracy at our public university, and OwlVision will connect departments directly to the issues posted by students in real-time so that school employees can more effectively respond to their needs.

Students may also broadcast their study schedule and location online and form impromptu study groups with other students to find help that would never have otherwise been possible. A great side effect of OwlVision is the increased engagement with school activities that can arise. Clubs can post upcoming events to enlist new members, many of which would never have known of their existence in the first place. OwlVision’s main goal is to create a hyperlocal vertex of information relevant to both school administrators and students alike, in order to foster a fuller campus experience, find more academic opportunities, and make new friends.

Competitive analysis

OwlVision’s main goal is to provide students and administrators with relevant information about what’s happening on FAU’s campus, including current events, issues, and study groups. Our service’s main competition are certain social media sites: Facebook, Twitter, and Yik Yak. The following list will break down each sites features and compare them to OwlVision’s.

1. Facebook
   1. Userbase is very broad: “Groups” can be used to narrow visibility of events and issues, but a usually new group is created for each event. Posts about issues may go unnoticed by administrators who are not friends with students.
      1. OwlVision is centralized and localized; a place for anyone who is part of the FAU family to view everything going on on campus.
   2. Feed clogged with irrelevant information: Facebook is primarily a social media site. Most users are posting statuses, photos, etc.; content that is irrelevant to campus life.
      1. OwlVision’s primary focus is not social media for entertainments sake. Our goal is to provide *relevant* content; information on academic or social events on campus, descriptions of problems with buildings, or study groups forming for your current classes.
2. Twitter
   1. Similar problems with the broad user base and visibility of posts. Hashtags can be used to search for tweets about certain issues and events, but constantly searching different hashtags is not an efficient way to view content.
      1. We provide a direct feed of relevant content tailored to the specific user, without the need for hashtags.
   2. Tweets have a hard character limit of 140; describing when and where a study group will meet, what class it is for, and what material will be covered is very difficult to do in only 140 characters.
      1. Posts on OwlVision will have no character cap, and clear fields detailing each piece of information about every event or issue posted.
3. Yik Yak
   1. Yik Yak is a location based application where users can post content about their community. However, it is missing some key features that OwlVision will provide. Yik Yak does not have separate accounts for campus administrators; a post about a lack of chairs in a classroom will most likely go unnoticed by the administration.
      1. We will have clearly visible responses from campus administrators; users will know their issue was noted and will soon be corrected.
   2. Yik Yak is also declining severely in popularity. A smaller user base means less content posted and less content viewed.

OwlVision’s main advantages over these competitors are its centralized and localized structure, and its feed of clear, relevant information on campus life. Keeping the service grounded at FAU means the only content users see is information that they care about; free pizza at the student union, a study group for their calculus II class, or a closure of the campus gym. Another strength of our service is the inclusion of administrators and professors, allowing students to post issues directly visible by those who can remedy them.

Overview and scenarios

1. User not logged in
   1. Splash page
   2. Information about OwlVision
   3. Call to action to register
2. User logged in
   1. Students
      1. Brought to student dashboard with most recent events, issues, and study groups
      2. Students can create events, issues, or study groups and post associated pictures, location and descriptions
      3. Students can comment on events or issues
   2. Administrators
      1. Administrators can change status of the issues, when they comment their username will be a different color and bolded

High-level functional requirements

1. User can signup and create a profile to track activity
2. Administrators can also sign up and monitor issues
3. Users and administrators have a dashboard displaying current state of campus
4. Users can post issues, events, and studygroups along with a picture and relevant information such as description and location
5. Navigation
   1. Dashboard
   2. Events
   3. Issues
   4. Student Resources
   5. Study Groups
   6. Notifications
   7. Profile
6. Database Schemas
   1. Everything will have timestamp for indexing and organization.
   2. Issues
      1. Title
      2. Author
         1. user\_id
      3. Priority
         1. Low
         2. Medium
         3. High
      4. Status
         1. Open
         2. In Progress
         3. Resolved
      5. Description
      6. Location
      7. Picture
      8. isAnonymous
      9. Comments
         1. Array of comment ids
   3. Event
      1. Title
      2. Author
      3. Description
      4. Location
      5. Date
      6. Comments
   4. Study group
      1. Class ID
      2. Start time
      3. End time
      4. Location
      5. Class
      6. Description
      7. Picture
   5. User Profile
      1. Email
      2. Username
      3. Class schedule (Class ID’s)
      4. Profile picture
      5. About me
      6. Interests
   6. Class
      1. Class ID
      2. Teacher
      3. Class Name
   7. User post
      1. Username of poster
      2. Post text
      3. Tags (Event, Class, Study group)
      4. Photo

Non-functional requirements

1. Scalability - This may just be a project but if it’s used by the school it could become huge so we need to be able to handle lots of users (1,000 - 10,000)
2. Integration - We need to be able to integrate it with FAU’s systems.
3. Speed - The response time needs to be no longer than a few seconds .
4. Extensibility - The application should be able to be expanded and features can be added.
5. Usability - This is going to be used by people that may not be familiar with computers. It should be very user friendly and where to go should be intuitive.
6. Emotional Impact - This website can not be boring and plain. It needs to have a WOW factor. Students will turn away from it if it’s just plain text. It should also make you think about FAU.

System development infrastructure

1. Languages: HTML, Javascript/JQuery, Node.js
   1. The listed languages will provide the backbone of the project.
      1. HTML will handle the display of our project on a web page. The product will be usable on modern web browsers such as Chrome and Firefox.
      2. Javascript and JQuery will be used to improve the functionality of our project.
      3. Node.js will aid us in creating a real time application that responds when events occur.
2. Hosting: Heroku
   1. Heroku is a cloud application platform that will eliminate time spent on server maintenance. This will give us more time to develop the project
3. Tools
   1. GitLab - An application that allows us to test and code our project together. It also
      * 1. provides git repository management, which makes file management easier.
   2. Putty - This will be used to transfer files.
   3. Slack - This is a text chat app and our main form of communication
   4. Trello - An app that will help us organize the development of our project
4. Frameworks: Express.js, Bootstrap, Auth0, Mongoose
   1. Express.js is a framework designed to create web servers with Node.js.
   2. Bootstrap will improve the visual aspect of our project.
   3. Auth0 will be used to handle authentication for our project.
   4. Mongoose is a framework which extends the mongodb core library which supports schemas to add sanity to our database integration.
5. Database: MongoDB
   1. A database that uses a document oriented model rather than a relational one. This will make database management easier.
6. Access methods:
   1. Language - English (possible support of multiple languages in future.)
   2. Desktop and mobile versions of…
      1. Chrome
      2. Internet Explorer 11+
      3. Firefox

**Team Name: Owl Vision**

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Members

Owner: Darek Dziamalek (ddziamalek2014@fau.edu)

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8. Deliverables

1. Project proposal Beginning of October
2. Use case Mid October
3. UI mockup in photoshop Beginning of September
4. User login and Dashboard Mid September
5. Testing
6. Fixing bugs
7. Demo and feedback
8. Final demo