

**Team Name:**

Open Identification

**Team Members:**

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**Client:**

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**Introduction to the Problem:**

Open source projects are known for the code that is developed from them however that is not what causes these projects to either live or die. Though it is true that an open source group can survive without a viable community in most cases there is a class of open source projects that lives or dies on the strength of its community such as the Apache Software Foundation projects. Existing tools are in place for tracking activity within online communities however these tools focus on identifying customers to the open source projects. The problem that is being focused on is that new tools need to be made to identify community leaders so that community builders know who to engage with.

**Project Description:**

The goal of this project is to build connections, collaborations, and identifications between community members and leaders in open source projects. This entails contributing to Apache Software Foundation's existing software platform to create tools that identify and support community leaders and members. Better tools will help identify potential community leaders which will then allow community builders to engage with and support those leaders. Over the course of the project, consistent updates check what tools were used as intended and which ones could be improved and expanded. Evaluation of the tools implemented is done in order to measure its significance and effectiveness.

The solution to this problem should be able to identify community leaders to people with a desire to improve the strength of a community around a specific project. This solution includes being able to observe Apache Software Foundation community activity on publicly available information such as meetups.com in order to identify those potential community leaders. The solution is to provide enough information to community builders to contact and engage with the leaders so that they can begin their own contributions to the projects.

## **Requirements:**

The end goal of our project is to create a tool for identifying community leaders for others to see and given the chance to get involved with by having a web page that will let users go through and view all of this data in one location. This data will be gathered from an algorithm that reaches out to meetups.com and use key terms to find community leaders. As a stretch goal we would like to have this algorithm gain data from other social media sites such as Facebook and Twitter.

We will be starting with a prototype that has been implemented which means we will need to start by fixing what doesn't work and then adding key features that we believe the project needs. In a final delivery there will be a patched version of the prototype with tool fixes along with new features to improve usability.

<b>REQ #</b>	<b>REQUIREMENT</b>	<b>EXPECTED COMPLETION</b>
<b>1</b>	Gain access to source code of the Community Developments page	11/30/2015
<b>2</b>	Implement system of improved sorting of finding events by nearby location within radius of the user	02/08/2016*
<b>3</b>	Fix the "People" page where profiles and people are not implemented	01/11/2016
<b>3.1</b>	Add user accounts to the application and track when a user has tweeted an event	01/18/2016
<b>3.2</b>	List tweets about events and/or people via the app	01/18/2016
<b>3.3</b>	List tweets about events and/or people from twitter, but not via the app	01/18/2016
<b>3.4</b>	Export a list of people and email addresses	01/25/2016
<b>4</b>	Add feature to generate a profile for community developers to have contacting information easily view-able	02/01/2016
<b>4.1</b>	Tweet at a person listed in the database	02/01/2016
<b>5</b>	Improve viewing method to examine the event itself and make all available information of the event to be seen more clearly	02/15/2016
<b>6</b>	Improve searching algorithm of tool to improve mechanism for finding more relevant events	02/22/2016*
<b>7</b>	Fix "Import Members" to allow importing of members	02/29/2016
<b>8</b>	Alpha Release	02/08/2016
<b>9</b>	Allow community developers to edit their own events for specific messages	03/07/2016
<b>10</b>	Beta Release	03/14/2016
<b>11</b>	Create profile system for users and community developers	03/14/2016
<b>12</b>	1.0 Release	05/20/2016

\*We expect this task to be more difficult, so we will work on the task in parallel to other tasks during that time.

### **Alpha/Beta/1.0 Releases:**

We plan to release the Alpha version of the project during week 6 of winter term where we will have multiple fixes complete for the tools that are already implemented in to the project that we are starting with. This will mean that the Alpha version will be a major patch on what is created already in order to improve the functionality of the current implementation. We plan to release the Beta version of the project during finals week of winter term where we will implement new tools for community leaders to manage their posts along with some other useful tools. Here we plan to have almost all of the functionality ready. Lastly version 1.0 will be released on May 16, 2016 which is the Monday prior to the engineering expo. This version will be our final release and should be bug free in the implementation of our project.

### **Specifications of Requirements:**

- Gain access to source code of the Community Developments page
  - Gain access to the source code for the prototype that can be seen at <http://comdev1-us-west.apache.org/events/> to begin working.
  - This will be given by client as we will be collaborating with him on testing the functionality of the prototype.
- Fix the “People” page where profiles and people are not implemented
  - Currently takes a large amount of time in order for the "people" page to load as it shows the current people who are identified as community leaders.
  - Figure out why the page takes such a long time to load. Could be too much data and the algorithm for pulling up this page needs to be changed.
  - Currently causing some browsers to crash.
- Fix “Import Meetups” action to allow developers to manually add their own event
  - When selecting the import meetups action the web server will throw a Django error that says HTTPError at /events/importMeetups.
  - This will need to be fixed and implemented correctly by having the Import Meetups action import the meetups data by having community leaders uploading their data to the site.
  - This could also be something for the user?

- Add user accounts to the application and track when a user has tweeted an event
  - This is so they don't inadvertently do it twice
  - Track date of tweet, tweet text and tweet ID
- List tweets about events and/or people via the application
  - This should work for the current user and others
  - Allows retweet or sending as new tweet based on existing one
- List tweets about events and/or people
  - This should be pulled from twitter but not via the app
  - Allow retweet or sending as a new tweet based on existing one
- Export a list of people
  - The emails corresponding with the people will be exported as well
  - Will be in JSON, CSV and test format for easy consumption in other applications
- Improve searching algorithm of tool to improve mechanism for finding more relevant events
  - The searching algorithm is currently returning data from meetups.com with searching for tag "apache" however this is not working correctly as it is pulling information that has nothing to do with open source projects and is very random.
  - The searching algorithm will need to be fixed so that it find the correct tags from meetups.com and pull the accurate data.
  - The stretch goal here is the be able to use this algorithm on multiple social media networks.
- Fix "Import Members" to allow importing of members
  - Fix import members action as right now it just reloads the current page.
  - Should prompt a way for the user or community members to add a member to the list and then get verified somehow.

- Alpha Release
  - Alpha to be released the 6th week of winter term.
  - This version will have some fixes for the improvement on algorithm, mark event action, mark group action, import members action, import meetups action, and the people action.
  - If not completely fixed/implanted the project will at least handle them by throwing a message to the user saying this tool is under construction.
- Allow community developers to edit their own events for specific messages
  - After the initial fixes are complete we are going to want to add accounts to be created for the community leaders so that once they are on the site they can add messages or events to their project.
  - This will also be able to let the community leader be able to decide if they want to be on this site which includes their project.
- Improve viewing method to examine the event itself and make all available information of the event to be seen more clearly
  - When an event is posted there should be two options the user can click on.
  - One option will send you to the source page for the event in order to get the full description and see the source page.
  - The other option will just give a basic information view of the event so the user can decide if they want to click the source or not.
  - This currently opens a new tab in the browser that gives a description and the user clicks the source and send them to another page. This is too far from the project page.
- Beta Release
  - The Beta of the project will be released on finals week of winter term.
  - In the Beta the fixes from the first Alpha should all be fixed correctly, and all of the tools that we wanted to add should be implemented but not necessary working correctly, at least has some functionality.

- Implement system of improved sorting of finding events by nearby location within radius of the user
  - The program will be able to get the location of the computer that is accessing the web page and based on this location the nearest community leader events will be shown to the user.
  - This might be a stretch goal for this project.
- Add feature to generate a profile for community developers to have contacting information easily viewable
  - Based on the data collected from meetups.com to identify the community leader not only will the events be posted but the community leader will have a section where the user can easily view the contact information pulled from meetups.com.
  - This should also be able to apply to other social media sites so the contact information can be presented.
  - This is not a collaboration communication tool but just a way to view the contact information.
- Create profile system for users and community developers
  - Have profiles for both community leaders and normal users.
  - Normal users can keep track of events they like and community leaders.
  - Community leaders can add items to their events and decide to get off the webpage.
- 1.0 Release.
  - This will be the final release where all of our implementations should be working correctly with no bugs.
  - This will be released on May 16, 2016 which is the Monday prior to the Expo.

### **Risk Assessment:**

- Miscommunication can happen in between the Community Development team currently working on the project.
- Security issues, unwanted access to source code from unauthorized individuals
- Algorithms created cause even slower computation time for certain aspects of the website
- If certain implementation is added and is miscommunicated to a function that was not originally discussed
- Pulling data from meetups could be corrupted
- Code does not match with already implemented coding standards on the project

### **Stretch Goals:**

- Create a notification system to alert users of important events that the user may be interested in.
- Create profile system for users and community developers
- Create a notification system to alert users of important events that the user may be interested in
  - The project will have a tool that will allow a user to enter their email and they will be notified when a project event is added that they may be interested in.
  - This could also be implemented to send emails to users that sign up for them to a certain community leader for a certain project rather than trying to figure out what they might be interested in.

### **Time Table Gant Chart:**

The gantt chart below shows the timeline we have set for our group to meet the requirements proposed in this document. We will be trying to fulfill this timeline as much as possible in a timely manner as it gives us a great path towards completing this project.

See gantt chart on next page.

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	15 M   T   W   T   F   S						
1		Problem Statement	0 days	Fri 10/16/15	Fri 10/16/15		Bruntmyer; Justin	<div>10/16</div> <div>Goossens; Megan</div>						
2		Requirements Document			Fri 10/30/15		Goossens; Megan							
3		Gain access to source	24 days	Wed 10/28/15	Mon 11/30/15		Bruntmyer; Justin							
4		Implement system of	51 days	Mon 11/30/15	Mon 2/8/16		Bruntmyer; Justin							
5		Fix the "People" action	21 days	Mon 1/11/16	Mon 2/8/16		Bruntmyer; Justin							
6		Add user accounts to	16 days	Mon 1/11/16	Mon 1/18/16		Bruntmyer; Justin							
7		List tweets about ever	6 days	Mon 1/11/16	Mon 1/18/16		Bruntmyer; Justin							
8		List tweets about ever	6 days	Mon 1/11/16	Mon 1/18/16		Bruntmyer; Justin							
9		Export a list of people	6 days	Mon 1/18/16	Mon 1/25/16		Bruntmyer; Justin							
10		Add feature to generate	6 days	Mon 1/25/16	Mon 2/1/16		Bruntmyer; Justin							
11		Tweet at a person list	6 days	Mon 1/25/16	Mon 2/1/16		Bruntmyer; Justin							
12		Improve viewing method	11 days	Mon 2/1/16	Mon 2/15/16		Bruntmyer; Justin							
13		Improve searching algorithm	6 days	Mon 2/15/16	Mon 2/22/16		Bruntmyer; Justin							
14		Fix "Import Members"	6 days	Mon 2/22/16	Mon 2/29/16		Bruntmyer; Justin							
15		Alpha Release	51 days	Mon 11/30/15	Mon 2/8/16		Bruntmyer; Justin							
16		Allow community development	6 days	Mon 2/29/16	Mon 3/7/16		Bruntmyer; Justin							
17		Beta Release	26 days	Mon 2/8/16	Mon 3/14/16		Bruntmyer; Justin							
18		Create profile system	6 days	Mon 3/7/16	Mon 3/14/16		Bruntmyer; Justin							
19		1.0 Release	50 days	Mon 3/14/16	Fri 5/20/16		Bruntmyer; Justin							

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

Project: Project3

Date: Wed 10/28/15





## Signatory Agreement

I acknowledge that I have read through this document and am aware that the contents are based within the scope of the project proposed.

Justin Bruntmyer, Senior Capstone Team Member

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Megan Goossens, Senior Capstone Team Member

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Hai Nguyen, Senior Capstone Team Member

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Ross Gardler, Client

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



