CRU App:
Vision and Scope

Will Code for Food
Computer Science Department
California Polytechnic State University
San Luis Obispo, CA USA
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Table of Contents

Credits

Name	Date	Role	Version
Kayla Carr	10/06/2015	Co-Author of Business Requirements, Vision of the Solution	1.0
Shelli Crispen	10/06/2015	Co-Author of Business Context, Vision of the Solution	1.0
Mallika Potter	10/06/2015	Co-Author of Competitor Overview, Vision of the Solution, Scope and Limitations	1.0
Gavin Scott	10/06/2015	Co-Author of Competitor Overview, Vision of the Solution	1.0
Mason Stevenson	10/06/2015	Co-Author of Business Context, Vision of the Solution	1.0
Brian Quezada	10/06/2015	Co-Author of Business Requirements, Vision of the Solution	1.0

Revision History

Name	Date	Reason for Changes	Version

1. Business Requirements

The business requirements provide the foundation for what we are going to do, and why we are doing it.

1.1. Background

CRU, or Campus Crusade for Christ, is a non-profit Christian organization centered on providing spiritual guidance, resources, programs and communities to college campuses nationwide, tailored for people from all cultures. CRU currently has movements in more than 1,140 college campuses nationwide. CRU Central Coast is a family of ministries stationed at different campuses around California's Central Coast, including Cal Poly SLO. Each campus contains a number of ministries tailored specifically for the many cultural and diverse groups within each school. CRU holds frequent events and servings for all their members, as well as events for each individual ministry. CRU's major goal is building a community among students that will connect them to Christ and each other, and building up a strong communication network that will get students involved through events, videos, and ministry sermons. To achieve these goals, CRU has requested the development of a mobile application for students that will encompass this.

1.2. Business Opportunity

As CRU continues to expand its reach, members, and ministry, there is an increased need to consolidate information and events in a way that will convey that information to a large number of people in a convenient and efficient manner. Building a mobile application for CRU is the best means of achieving this. Such an application would afford CRU a means of sending notifications, videos and event locations to entire ministries at once, while also affording individuals the option to join and access information about said communities and ministries at any time through the convenience of their phones.

Currently, CRU is handling this by distributing event times, meetings, and car pools through their online website and via in-person congregations, which is inefficient and difficult for members to access. Carpools, in particular, are tediously recorded via online spreadsheets, occasional third-party applications, and constant communication. There is thus a large need among both members and staff of CRU for a specialized mobile application that is able to handle the access and distribution of information about events, community groups and ministries, carpooling and videos within a single convenient software.

1.3. Business Objectives and Success

Cru wants their application to easily connect students to a Cru ministry and a Cru community group. Push notifications will get users information about events, opportunities to serve, and other information from Cru ministries. This will make it far easier for members of Cru to get the information from one spot, rather than having to go to several services such as Facebook and Twitter to learn about Cru's ministries. The

application will also connect members to community groups after knowing information such as availability. This serves to grow membership and keep people connected to a Cru ministry.

The app will also serve as a ride sharing service for organization events. The goal of this is to make it easy for a member of the Cru organization to give or receive rides that will line up with the time that they wish to leave for or from an event. It will be easier for people to get to events, and will diminish the barrier of entrance to these events.

1.4. Customer or Market Needs

The main use that can be gained from this application from a member of Cru is centralizing information about Cru ministries. Getting all necessary and relevant information from a club is valuable to any member of that club.

There needs to be as little barrier to entrance as possible to most of these services. Unnecessary logins and information sharing may deter users from keeping the app. Ride sharing may only need time of departure, a phone number, for drivers, the number of seats in the car. Connecting to a community group should not need much information besides a phone number and availability.

Ride sharing is imperative for large retreats that are put on by a club. There are very few good applications for ride sharing today. Some problems with most ride-sharing applications include requiring adoption from many people within a short vicinity of each other, and difficulty to get more than one person leaving from a specific place to another specific place. Narrowing the focus to a single club or organization helps mitigate some of the issues.

1.5. Business Risks

Many people may just not get the app. In a day and age when every website is telling you to get another app, it is easy for people to dismiss it as another useless app. If there is no clear value or if there are too many notifications to students, there is a risk of it being quickly deleted.

One problem that could arise with ride-sharing is a lack of adoption. You need many drivers to get good results for people looking for a ride. If people don't use the application, there won't be available rides.

Possible security risks may also arise with the ride-sharing feature. Since the app contains has no verifications to make sure a user is actually a member of CRU, outside users may be able to access contact information or pose as drivers, which might put CRU at liability.

2. Vision of the Solution

2.1. Vision Statement

The solution involves three main sections: ride-sharing, feeds and information, and joining community groups. This application aims to reduce the load on Cru leadership by allowing members to easily coordinate for events, find or offer rides and access relevant information.

For students that participate in various ministries, the main focus of the app is to provide them with an easily accessible source of information pertaining to their ministries, community groups, and events.

For students that wish to offer or find rides, the main focus of the app is to allow a driver to broadcast their availability to drive for a specific event, and allow users that need a ride to that event to trade contact information with a driver.

For community leaders, the main focus of the app is to view administrative resources and connect with members that wish to join the community group they lead.

2.2. Major Features

FE-1	Subscribe to a ministry and access ministry resources.
FE-2	Push notifications for ministry events.
FE-3	Join community group based on user's personal information.
FE-4	Ride sharing to and from Cru events.
FE-5	Access community leader resources.

2.3. Assumptions and Dependencies

AS-1	All users of the app will have an Android phone or iPhone.
AS-2	All users of the app will be competent in English.

3.   Scope and Limitations

3.1.   Scope of Initial and Subsequent Releases

Features	Alpha Release	Beta Release
FE-1	Fully implemented.	Fully implemented.
FE-2	Fully implemented.	Fully implemented.
FE-3	Fully implemented.	Fully implemented.
FE-4	Not or partially implemented.	Fully implemented.
FE-5	Not or partially implemented.	Fully implemented.

3.2.   Limitations and Exclusions

L1-1	TBD
EX-1	TBD

4.   Business Context

4.1.   Stakeholder Profiles

Stakeholder	Type	Value	Interests	Constraints
Students	First Degree System Stakeholder	Ease of use	CRU articles and events	none
CRU Leadership	Second Degree System Stakeholder	Ease of use, effectiveness of information distribution	Distributing information, facilitating ride sharing	none
CRU Devs	Third Degree System	Easy maintenance,	App maintenance	Limited Time

	Stakeholder	extensibility		
402 Devs	Project Stakeholder	Realistic goals, clear direction, easy to use tools/languages	Building a full featured, high quality mobile app	none
Dr. Janzen	Project Stakeholder	402 team participation and interest	Organizing and helping 402 teams succeed	none
Kyle Fletcher	Project Stakeholder	App features, functionality, and look.	Creating an app that provides a kickstart to community, and facilitates increased coordination, communication, and information.	none
Jen	Project Stakeholder	"CRU look"	Visual consistency across all CRU media	only gives feedback.

4.2. Project Priorities

Dimension	Driver	Constraint	Degree of Freedom
Schedule	We need to release Alpha and Beta versions of our app. We must have the final release by the end of quarter 3.	Three quarters to finish this app.	
Features	We must implement what Kyle and Cru wants.	Graphics and Coding standards are set by the Cru organization.	We are free to design the app how we see fit.
Quality			No formal measure of quality has been set.
Staff		Project team is composed of 6 student developers. A member of Cru is giving us feedback.	
Cost		Each student developer must spend 8- 12 hours a week with very little variation	

4.3.   Operating Environment

OE-1	The app shall be available on both Android and iOS platforms
OE-2	The app shall pull data from the existing CRU database
OE-3	The app shall comply with CRU visual and coding standards

5.   Competitor Overview

5.1.   Facebook

Facebook is currently one of the primary services used by CRU to plan events and send information to its members, and has the benefit of an already large user-base. In terms of spreading information it performs decently well; a CRU page can be followed by anyone or a private page could be followed only by people who were individually invited, but there is no functionality allowing for subgroups under a larger umbrella group, such as the CRU ministry-campus relationship, and separate groups have no easy way to be linked together. As an event planner it is relatively useful, allowing for easy event creation but lacks the ability to easily invite a large number of people at once. There is also no ride-sharing functionality, which is one of the primary problems CRU hopes to address with the app.

5.2.   Carma

Carma is a carpool/ride-sharing app that provides many of the features that CRU is looking for regarding organizing transportation for their members, and could serve as a useful model for the ride-sharing portion of our app. It allows a user to designate themselves as a driver and others to ask for rides, as well as providing some level of security to protect the users. There are many services that work similarly, but Carma is unique in that it allows drivers to choose between either accepting a fixed per-mile rate to be paid by the people getting a ride or offering a free ride, a feature that CRU would likely support. However, you can't tie multiple drivers to any event, so it would be difficult to organize mass-transport to and from the large events CRU plans.

5.3.   Poly Rides

Poly Rides is a carpool/ride-sharing app developed by Cal Poly students Myra Lukens and Vanessa Forney. It provides a simple interface to offer rides, search for rides, coordinate rides, view mutual friends with drivers, and message users. Drivers can offer rides, specifying their departure and arrival addresses, date and time of departure, cost per seat, and number of seats available. Passengers can enter a departure and arrival address and ideal date and time of departure. They will be given a list of rides available within 24

hours of their departure time, sorted by proximity to the desired route. Passengers can also see mutual friends with their potential drivers. This app features Facebook integration for safety reasons, in-app messaging and a ride sorting algorithm. However, it is currently only available for iOS, which means that Android users cannot use it at this time.

5.4. Beep: Personal Event Organizer

Beep is a personal event organizer app aimed to allow the user to easily create events, organize events, and send out invitations. It allows users to create events and invite friends through Beep. It has a messaging system that works across multiple types of devices to facilitate event communication. It uses location services for users to plan itineraries and check in to events. Finally, users can share memories from the events to social media easily. It is available for Android and iOS. Beep is ad-supported, which means that users may see ads that are objectionable to them.