Operational Concept Description (OCD)

Populic

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Version History

Date	Author	Version	Changes made	Rationale
09/21/17	PP	1.0	• Initial draft	• Initial draft
10/05/17	PP	1.1	• Added section 3.3	• Section 3.3 was added to provide traceability for the outcome in the Benefits Chain

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1. Introduction

1.1 Purpose of the OCD

This document provides, in detail, the shared visions and goals of the stakeholders of the Populic. This project will be implemented on the application designed by Vili Vaananen and his team. The success-critical stakeholders of the project are Vili Vaananen, as the project owner and maintainer; the USC students, as users.

1.2 Status of the OCD

The status of the OCD is currently at the version number 1.0 in the Development phase. The operational concept of current system is to implement risk mitigation part identified in the exploration phase.

2. Shared Vision

Table 1: The Program Model

<table>
<tr><td colspan="4">Assumptions:
●Users would like to show their life.
●Students are interested in knowing and joining activities that happen around them.
●Activity holders have incentives to post their activities to the App.</td></tr>
<tr><th>Stakeholders</th><th>Initiatives</th><th>Value Propositions</th><th>Beneficiaries</th></tr>
<tr><td>• Developers
• Client
• Maintainers
• Users
• Activity holders</td><td>• Develop the challenge part of the app
• Design the app(UI), advertise the app
• Maintain the app
• Keep using the app and give feedback
• Post activities
• Challenge their friends</td><td>• Attracting more people to join the activities
• To promote activities
• To help students to find out what is happening around them and increase users' happiness</td><td>• Users
• Activity holders
• Clients</td></tr>
<tr><td colspan="2">Cost
• Maintenance costs
• Development costs
• Advertising/Marketing costs</td><td colspan="2">Benefits (Metrics)
• Increase the number of users in "Populic"
• Increase the revenue in the future
• Increase the posts</td></tr>
</table>

2.1 Benefits Chain

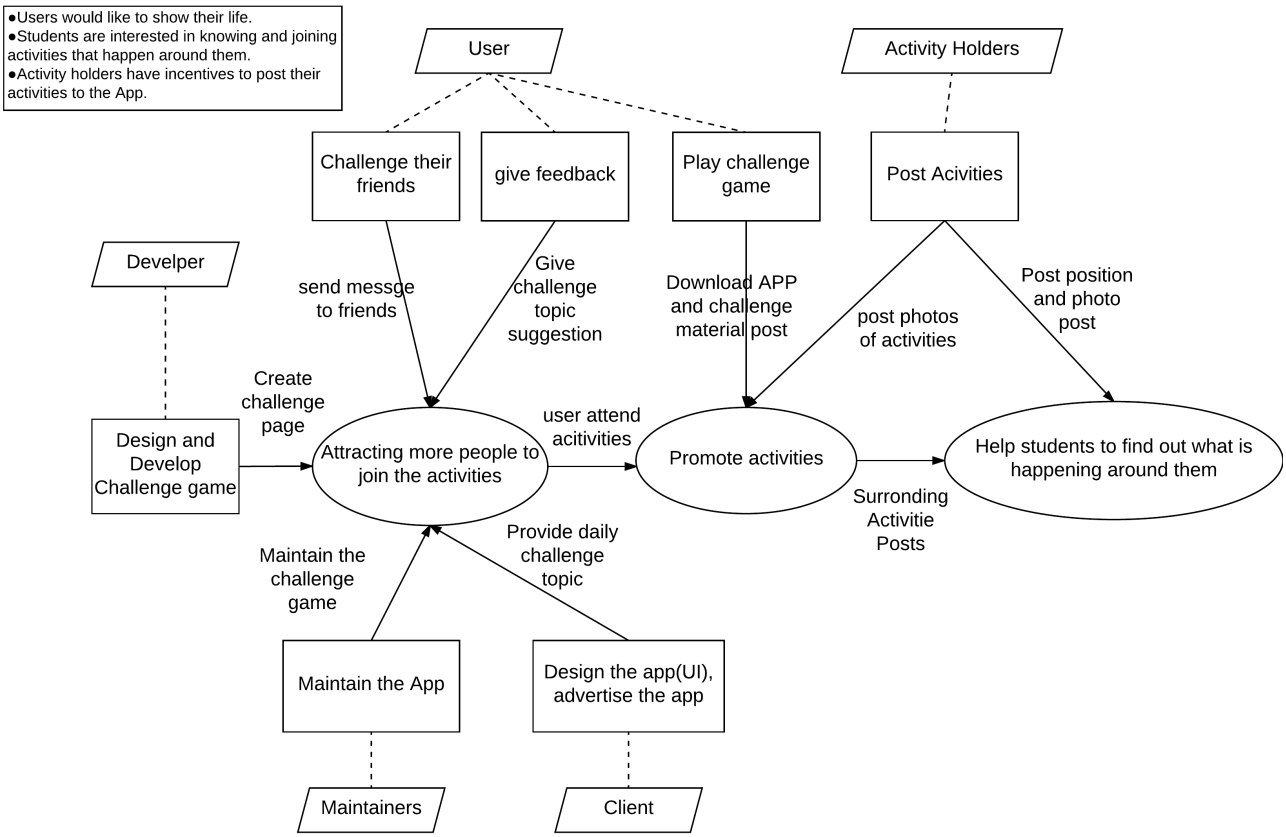


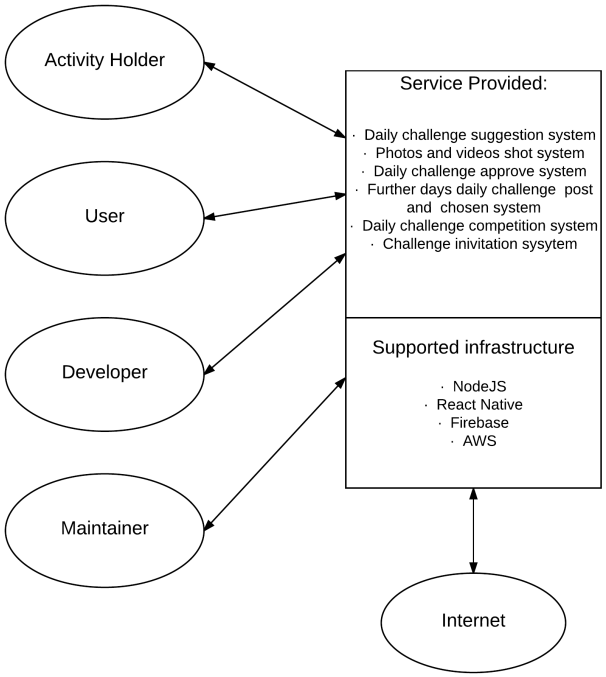
Figure 1: Benefits Chain Diagram of Volunteer Tracking System

2.2 System Capability Description

- The Goal of the Populic is to allow people to conveniently check the surrounding community. It also aims to help activity holders from schools, and other organizations (or even individuals) to promote their activities. Thus, our target customers are such on campus students who are interested in attend the out-door or in-door activities.
- The system consists a mobile application that allow users to finish daily challenge, post photos/videos on communities and check surrounding communities.

2.3 System Boundary and Environment

Figure 2: System Boundary and Environment Diagram of Challenge



3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

The current system comprises of a IOS application that give a platform for both user and activity holders. A Map based user current location will be displayed on main page, all built surrounding communities will be automatically shown on Map. There exists a registration system that user can register account via Facebook account and Gmail account. The users and activity holders also can create communities, connect built in phone camera and post pictures.

3.1.2 Artifacts

Artifact	Description
Use Case Diagrams	Describe the required features of the system
Activity Diagrams	Defines the flow of a certain process
Design Document	The software description that is given to the development team.
Software Architecture	The structure of a software system.
Prototype	Created to avoid any system risks and defects
Data Model	The relationship between entities.

3.1.3 Current Business Workflow

User	Activity Holder

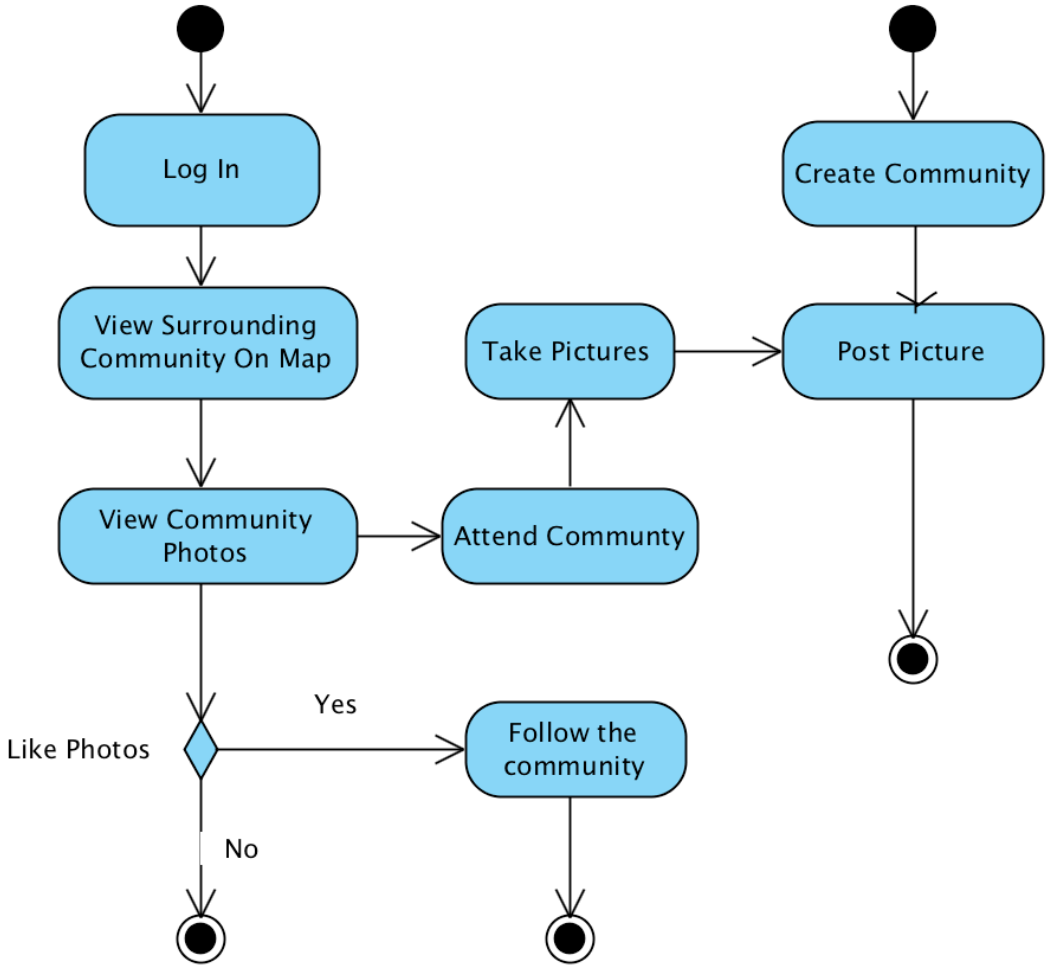


Figure 3: Current Business Workflow Diagram of Populic

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

Capability Goals	Priority Level
OC-1 Challenge Photos and Videos Post: The system can post challenge photos and videos on community	Must Have
OC-2 Challenge Complete Competition: The user can choose one friend to compete the time of finishing daily challenge	Must Have
OC-3 Challenge Game Suggestion: The user can send their feedback and challenge ideas to client.	Must Have
OC-4 Further 5 Days Daily Challenge Post: The system will post further 5 days daily challenge.	Must Have
OC-5 View, Approve or Decline Challenge: The users are capable of viewing, approve or cancel their friends challenge post.	Must Have
OC-6 Challenge Game Pop Screen: The user will touch the pop screen to get all daily challenge information	Must Have
OC-7 Offline&Online Notification: The user will get notification from challenge game.	Must Have
OC-8 Competition Reward: The user will get notification from challenge game.	Must Have

3.2.2 Level of Service Goals

Table 2: Level of Service Goals

Level of Service Goals	Priority Level	Referred WinWin Agreements
LOS-1: The system can connect user's phone contact list, load contacts with phone numbers	5	Win Condition (WC_4550): As a user, I can invite my friends to participate the challenge via contact list.
LOS-2: The system should display all daily challenge information on the pop screen.	5	Win Condition (WC_4531): As a user, I will see the daily challenge information on pop up screen.

3.2.3 Organizational Goals

OG-1: Enlarge user's happiness.
OG-2: Raise interactions between different users.
OG-3: Increase the number of active users in Populic
OG-4: Inform students what is going on around the campus.

3.2.4 Constraints

CO-1: iOS as an Operating Systems: The new system should work on iOS
CO-2: React Native as a Development Language: React Native will be used as a front-end development language.
CO-3: AWS as an Operating System: the available back-end server is AWS
CO-4: Paid Database System: the paid database system is Firebase.

3.2.5 Relation to Current System

Table 3: Relation to Current System

Capabilities	Current System	New System
Roles and Responsibilities	• User can view photos and videos in communities. • User can add picture to communities that every user can see.	• User can view challenge photos and videos in communities. • User can add challenge picture to communities that every user can see. • User can view challenge picture from their followers and friends.
User Interactions	N/A	• Check all challenge information in Challenge pop screen • Get online and offline App notification
Infrastructure	N/A	• New database, Server
Stakeholder Essentials and Amenities	N/A	N/A
Future Capabilities	N/A	N/A

3.3 Proposed New Operational Concept

3.3.1 Element Relationship Diagram

Figure 4: Element Relationship Diagram

3.3.2 Business Workflows

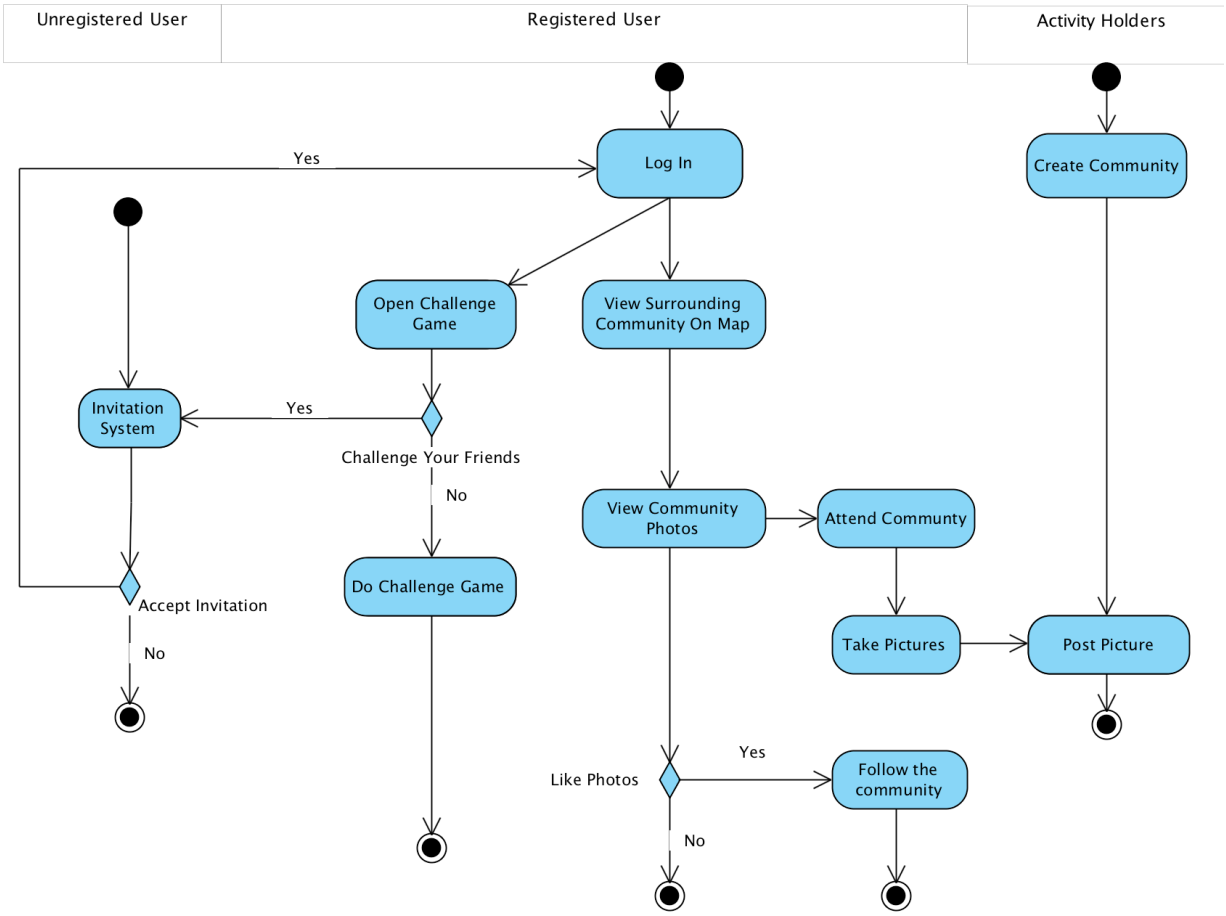


Figure 5: Proposed Business Workflow Diagram of Populic

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

- The need to hire a new system maintainer to take care of the system, the system maintainer will be responsible for choosing the daily challenge topic.
- The need to integrate our challenge game to current system

3.4.2 Operational Transformations

As the challenge is intended to supplement the current program, it is not likely to cause any significant changes in the current operational procedures.