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# **Software Requirements Specification**

**for**

## **AZConnections, Release 1.0**

**Version 1.0 approved**

**Prepared by Benjamin Heins**

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## Table of Contents

<b>AZConnections, Release 1.0 .....</b>	<b>i</b>
<b>Version 1.0 approved .....</b>	<b>i</b>
<b>Prepared by Benjamin Heins .....</b>	<b>i</b>
<b>1. Introduction .....</b>	<b>1</b>
1.1 Purpose .....	1
1.2 Scope .....	1
1.2.1 Product Name.....	1
1.2.2 Overview.....	1
1.2.3 Goals .....	1
1.2.4 Out of Scope.....	1
1.3 Product Overview .....	2
1.3.1 Product Perspective.....	2
1.3.2 Product Functions .....	4
1.3.3 User Characteristics .....	4
1.3.4 Limitations .....	5
1.4 Definitions .....	5
<b>2. References .....</b>	<b>5</b>
<b>3. Specific Requirements.....</b>	<b>6</b>
<b>4. Verification.....</b>	<b>8</b>
<b>5. Appendices .....</b>	<b>10</b>
5.1 Assumptions and Dependencies .....	10
5.2 Use Cases for Customers.....	10

# **1. Introduction**

## **1.1 Purpose**

With lack of communication between students on campus has stayed low and group work has increased on-campus AZConnections will help connect the campus and allow projects to become easy and hassle-free for students.

## **1.2 Scope**

### **1.2.1 Product Name**

AZConnections

### **1.2.2 Overview**

The purpose of this website/software is to connect students across universities so that they don't need to pay freelancers and can meet new people around their school. With this business, the objective is to have a community of students working together and building the platform from scratch.

### **1.2.3 Goals**

This software will be applied to college and larger high school campuses in order to help the student population become more connected and also allow the students to find groups to work on projects with. This would allow the students to quickly and painlessly find partners for class projects or help them find partners in interest when trying to start a business or create a product of some sort for their portfolio. This will also allow campuses to have more student involvement in the classroom and this is due to the fact that the students will be able to also find help with classes on here when needed.

- Gain experience working in a team for later needs like job interviews and also projects later on in the student's schooling
- The students gain skills that can be used in their careers later like time management and critical thinking within the span of finishing one project
- Connect at least 5000 students on each campus that utilized this software
- Stay under the budget when creating this software so that the consumer doesn't get upset
- Have no additional payments for users utilizing the software
- Within 10 years of having this software out at least 75% of colleges utilize this software

### **1.2.4 Out of Scope**

- The solution will not give the students ideas for projects
- Will not connect to students outside of the school respective campus or students
- Not give the students the ability to see reviews left on their profile
- No ability for project members to be removed from the project

## 1.3 Product Overview

### 1.3.1 Product Perspective

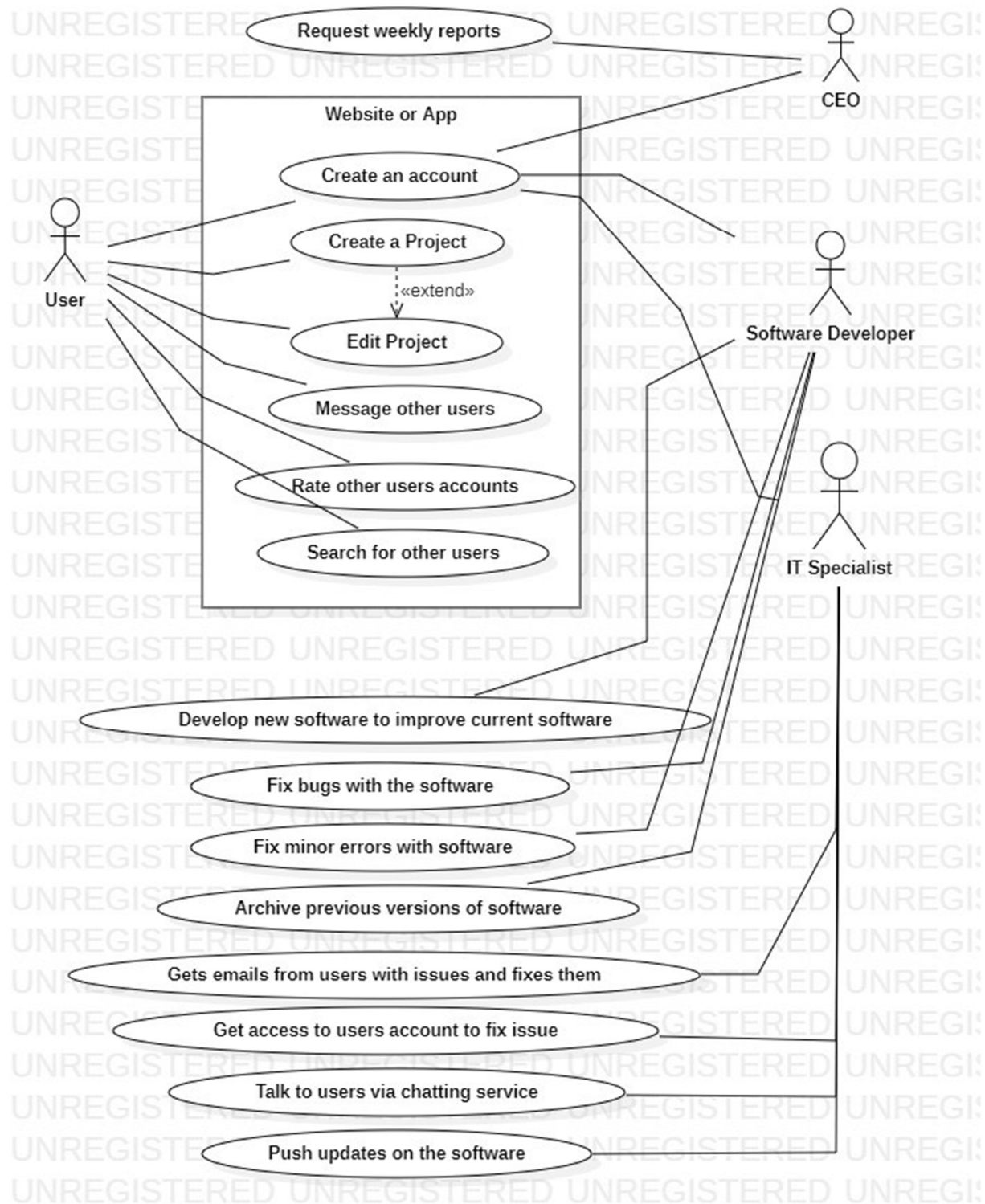


## O-LEVEL DFD

### Constraints

- REQ-42 The user's password must include at least 1 number and 1 special character.
- REQ-43 Ratings are a mandatory at the end of each project and cannot be skipped.
- REQ-44 When creating an account a valid email address is required for account set up.
- REQ-45 Only one IT member can be chatting with a user at a time.
- REQ-46 The CEO must submit a master password to get access to the weekly report.
- REQ-47 The website shall be the colors Blue, Black, and Gray.
- REQ-50 Only after completing a project may users rate the other users in their group.
- REQ-51 The CEO has access to any part of the product when needed by inputting their master password
- REQ-52 There must be a department selection bar for finding specific people for a project.
- REQ-53 The user must send a email verification during profile creation to prove that the email they use is theirs.

## Use-Case Diagram



### **1.3.2 Product Functions**

- Allow users to click on another users profile and see what they have put on their profile
- Users can create teams/groups and invite other users to them for help and collaboration
- Users can leave reviews on other users after a project is done so that other users may see how the other person is in a team setting
- You can delegate work between users, which creates a to-do list for that user of things they must do on the project
- Project members(users) get informed when another user is working on the project
- Project members get weekly updates on what within the to-do list was completed or was being worked on when the week ended.
- Users can see all the projects they have completed/worked on during their time using the software and view them whenever they would like
- Users can access their profile and project via phone on the website/app

### **1.3.3 User Characteristics**

#### **Customer Characteristics**

- know how social media works
- Internet Literate
- Have a project they want to complete with a group

#### **Website Designers**

- Know how to work Wix
- Be able to quickly create pages for a website
- know how to work a computer
- know how email works

#### **Software Engineers**

- Code using Java or C++
- Quickly debug software
- Use email
- Comment code effectively
- Know how a computer works

#### **IT Department**

- Have great interpersonal skills
- Good Communication
- Be able to fix minor user errors/issues
- know how to work a computer
- know how email works

## Maintainers

- Be able to keep the website up and running
- push updates when needed
- Help with any maintenance
- know how to work a computer
- know how email works

## Customer Relations

- Answer a phone
- help customers
- Have good communication
- know how to work a computer
- know how email works

## 1.3.4 Limitations

REQ-31	No finding users on another campus for groups	limitation
REQ-30	You cannot work on more than 4 projects at a time	limitation
REQ-29	The user's profile pictures cannot be inappropriate	limitation
REQ-28	When editing a project you may only edit while running the software on a computer	limitation
REQ-27	You cannot spam message people with the chat feature	limitation
REQ-26	When creating a password you must use at least 1 number and 1 special character(@#%+&*)	limitation
REQ-25	When creating an account you cannot have a password shorter than 9 characters When creating an account you cannot have a password shorter than 9 characters When creating an account you cannot have a password shorter than 9 characters	limitation
REQ-24	One email cannot be used to create multiple accounts	limitation
REQ-23	The system cannot go down for maintenance between the times of 9 am and 8 pm on weekdays	limitation
REQ-22	The software must be written in Java	limitation

## 1.4 Definitions

There is currently no special slang or words used within the business

## 2. References

All this information has come from CEO Ayoub Amrouss

### 3. Specific Requirements

<p><b>Key:</b> REQ-62  <b>Summary:</b> The help tab will be displayed when in a chat with another user for easy access.  <b>Description:</b> This allows for the users to easily have access to help when needed.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Interface, Usability</p>
<p><b>Key:</b> REQ-61  <b>Summary:</b> The user who created the project shall be able to make changes to the participant list through the project settings tab within the project.  <b>Description:</b> This allows the project owner to determine who is in the project and remove them if they are causing issues.  <b>Priority 1(lowest)-5(highest):</b> 3  <b>Labels:</b> Functional, Interface, Usability</p>
<p><b>Key:</b> REQ-60  <b>Summary:</b> The IT workers are the first to see the tickets in their inbox when it comes to bugs in the system.  <b>Description:</b> This allows for the IT department to determine the severity of the bug and correctly determine where it shall be sent.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Interface, Usability</p>
<p><b>Key:</b> REQ-59  <b>Summary:</b> The users can send project links through the chat system to invite others to help them.  <b>Description:</b> This allows for quick and easy invitations for projects.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Usability</p>
<p><b>Key:</b> REQ-58  <b>Summary:</b> The user shall be able to set their profile to online or offline when wanted.  <b>Description:</b> This allows for users to get some privacy when they just want to work in peace and don't want to be bothered by other users.  <b>Priority 1(lowest)-5(highest):</b> 1  <b>Labels:</b> Functional, Usability</p>
<p><b>Key:</b> REQ-56  <b>Summary:</b> The users shall be able to access their most recent project from the home screen.  <b>Description:</b> This gives the users quick access to their projects.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Interface, Performance</p>
<p><b>Key:</b> REQ-55  <b>Summary:</b> The users shall be able to search their personal chats for previous statements.  <b>Description:</b> This allows users to find valuable/needed information in a chat quickly and effectively.  <b>Priority 1(lowest)-5(highest):</b> 2  <b>Labels:</b> Functional, Usability</p>
<p><b>Key:</b> REQ-54  <b>Summary:</b> The Users shall be able to customize their profile picture and banners while in their profile.  <b>Description:</b> This allows the user to feel like they have control over their profile and can make it more unique.  <b>Priority 1(lowest)-5(highest):</b> 2  <b>Labels:</b> Functional, Usability</p>



<p><b>Key:</b> REQ-49  <b>Summary:</b> The users pages shall always show their friends list and which friends are online or offline.  <b>Description:</b> This allows for the user to know who is online and can respond to messages quicker than others.  <b>Priority 1(lowest)-5(highest):</b> 3  <b>Labels:</b> Functional, Interface</p>
<p><b>Key:</b> REQ-48  <b>Summary:</b> The users home page shall display the general chat as the main feature near the middle of the screen.  <b>Description:</b> This allows for the users to quickly get in contact with other users for finding a project to start working on.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Interface</p>
<p><b>Key:</b> REQ-41  <b>Summary:</b> The user system shall display their average rating under their profile picture in their profile.  <b>Description:</b> This allows for the user to see what the other users' rating is so that they can determine if they would like to work with them.  <b>Priority 1(lowest)-5(highest):</b> 2  <b>Labels:</b> Interface, Non-Functional</p>
<p><b>Key:</b> REQ-40  <b>Summary:</b> The software development system shall display any mandatory fixes to the system at the bottom right of their screen by time bug was found.  <b>Description:</b> This allows for the development team to see all the bugs and issues that need to be fixed. This also reduces the risk of forgetting what was being done on a previous day.  <b>Priority 1(lowest)-5(highest):</b> 2  <b>Labels:</b> Functional, Interface</p>
<p><b>Key:</b> REQ-39  <b>Summary:</b> The user system shall display the most recently edited project in ascending order by date in which they were edited.  <b>Description:</b> As a User, I want to be able to see all the projects I have done and am doing so that I can see my whole portfolio  <b>Priority 1(lowest)-5(highest):</b> 3  <b>Labels:</b> Functional, Interface</p>
<p><b>Key:</b> REQ-38  <b>Summary:</b> The help chatting service shall display to the IT department when a user utilizes the service and shows the chat box in the bottom right of their screen.  <b>Description:</b> As a Customer Satisfaction Worker, I want to be notified when a customer needs help with an issue so that I may resolve it swiftly.  <b>Priority 1(lowest)-5(highest):</b> 3  <b>Labels:</b> Functional, Interface</p>
<p><b>Key:</b> REQ-37  <b>Summary:</b> The CEOs system shall prompt him when he logs in to save the weekly reports and display the pdf after they are saved.  <b>Description:</b> This allows the CEO to never forget to save the weekly reports.  <b>Priority 1(lowest)-5(highest):</b> 5  <b>Labels:</b> Functional, Performance</p>
<p><b>Key:</b> REQ-36  <b>Summary:</b> The Server system shall send and display a notification to the IT team's computer on the top right of their screen when a server issue arises.  <b>Description:</b> As an IT specialist, I want to get notifications whenever there is a server issue so that I may fix it and keep users happy.  <b>Priority 1(lowest)-5(highest):</b> 4  <b>Labels:</b> Functional, Interface, Performance</p>

<b>Key:</b> REQ-35 <b>Summary:</b> The project system shall display the last time the project was modified with the time of the revision to the immediate right of the project. <b>Description:</b> This allows the user to see when the project was last modified just in case they need to find some sort of revision history. <b>Priority 1(lowest)-5(highest):</b> 3 <b>Labels:</b> Functional, Interface
<b>Key:</b> REQ-34 <b>Summary:</b> The chat system shall display recent messages in descending order by the date and time it was sent. <b>Description:</b> This allows the user to see what the other person said and when they said it, so that they may respond with the correct response. <b>Priority 1(lowest)-5(highest):</b> 4 <b>Labels:</b> Functional, Interface
<b>Key:</b> REQ-33 <b>Summary:</b> The ticket system shall display the pending users requests in ascending order by date they were submitted. <b>Description:</b> This allows the support staff to help users quickly and effectively with their issues and remember who was first in the order. <b>Priority 1(lowest)-5(highest):</b> 3 <b>Labels:</b> Functional, Interface
<b>Key:</b> REQ-32 <b>Summary:</b> The user's system in the software shall store no more than 100 projects per user, in order by the date in which it was created. <b>Description:</b> This requirement is setting a limit to the number of projects that a user can create on their account so that they do not overload the servers. <b>Priority 1(lowest)-5(highest):</b> 2 <b>Labels:</b> Database, Non-Functional

## 4. Verification

<b>Key:</b> REQ-62 <b>Summary:</b> The help tab will be displayed when in a chat with another user for easy access. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-61 <b>Summary:</b> The user who created the project shall be able to make changes to the participant list through the project settings tab within the project. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-60 <b>Summary:</b> The IT workers are the first to see the tickets in their inbox when it comes to bugs in the system. <b>Verification Approach:</b> Test
<b>Key:</b> REQ-59 <b>Summary:</b> The users can send project links through the chat system to invite others to help them. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-58 <b>Summary:</b> The user shall be able to set their profile to online or offline when wanted. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-56 <b>Summary:</b> The users shall be able to access their most recent project from the home screen. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-55 <b>Summary:</b> The users shall be able to search their personal chats for previous statements. <b>Verification Approach:</b> Demonstration

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<b>Key:</b> REQ-49 <b>Summary:</b> The users pages shall always show their friends list and which friends are online or offline. <b>Verification Approach:</b> Inspection
<b>Key:</b> REQ-48 <b>Summary:</b> The users home page shall display the general chat as the main feature near the middle of the screen. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-41 <b>Summary:</b> The user system shall display their average rating under their profile picture in their profile. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-40 <b>Summary:</b> The software development system shall display any mandatory fixes to the system at the bottom right of their screen by time bug was found. <b>Verification Approach:</b> Test
<b>Key:</b> REQ-39 <b>Summary:</b> The user system shall display the most recently edited project in ascending order by date in which they were edited. <b>Verification Approach:</b> Test
<b>Key:</b> REQ-38 <b>Summary:</b> The help chatting service shall display to the IT department when a user utilizes the service and shows the chat box in the bottom right of their screen. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-37 <b>Summary:</b> The CEOs system shall prompt him when he logs in to save the weekly reports and display the pdf after they are saved. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-36 <b>Summary:</b> The Server system shall send and display a notification to the IT team's computer on the top right of their screen when a server issue arises. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-35 <b>Summary:</b> The project system shall display the last time the project was modified with the time of the revision to the immediate right of the project. <b>Verification Approach:</b> Inspection
<b>Key:</b> REQ-34 <b>Summary:</b> The chat system shall display recent messages in descending order by the date and time it was sent. <b>Verification Approach:</b> Demonstration
<b>Key:</b> REQ-33 <b>Summary:</b> The ticket system shall display the pending users requests in ascending order by date they were submitted. <b>Verification Approach:</b> Test
<b>Key:</b> REQ-32 <b>Summary:</b> The user's system in the software shall store no more than 100 projects per user, in order by the date in which it was created. <b>Verification Approach:</b> Test

## **5. Appendices**

### **5.1 Assumptions and Dependencies**

- Connecting the school's campus will make a more engaged student population
- Connecting the students will make it easier for them to find friends and partners for assignments and projects
- Students struggle to find partners outside their immediate friend circles
- Students get complacent and don't always try to reach out and meet new people
- New freshman and transfer students struggle to form connections due to a lack of knowledge of the campus and the people who are on it.

### **5.2 Use Cases for Customers**

There are currently no acronyms and abbreviations in this project that new workers or users need to be concerned about