

# SW Engineering CSC648/848 Spring 2021

Docupaxx

Team 7

Milestone 1

3/5/21

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## History Table:

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# **I . Executive Summary**

Saving documents has always been a hassle for people, as they have to search through all of their files, physically and digitally, to see where they are stored. Being able to organize records is certainly a life skill, but it is an impediment that can be helped by modern technology. People can get tired and frustrated as it wastes their time in their search and they may not always be successful. And if someone is from another country, the overall burden would be even harder for that individual. This level of difficulty may be strong enough to deter people from a particular organization entirely. To fulfill their needs, as well as provide an opportunity for an organization to increase its revenue, we decided to create Docupaxx, a user friendly app that allows easy organization for documents.

Compatible on a computer, phone and tablet with internet access, Docupaxx provides users the ability to store hundreds of pages of documents that will be conveniently organized. Users will be able to find the required information from organizations they are applying to right at a glance. Our website also allows people to send documents directly to registered organizations and prepare their uploaded documents for personal use.

The fact that the user does not have to leave our website in order to find multiple organizations' application requirements and the application submission being a quick and convenient feature for the user is what the other competitors do not have. In addition, Docupaxx presents required documents in a seamless, To Do List type of manner. With the efficiency of file sharing, the users can bypass individual organizations' contact information by the simple process of sending files directly to the organization's Docupaxx account. Furthermore, Docupaxx does a good job of assembling documents to reduce user frustration and disorganization.

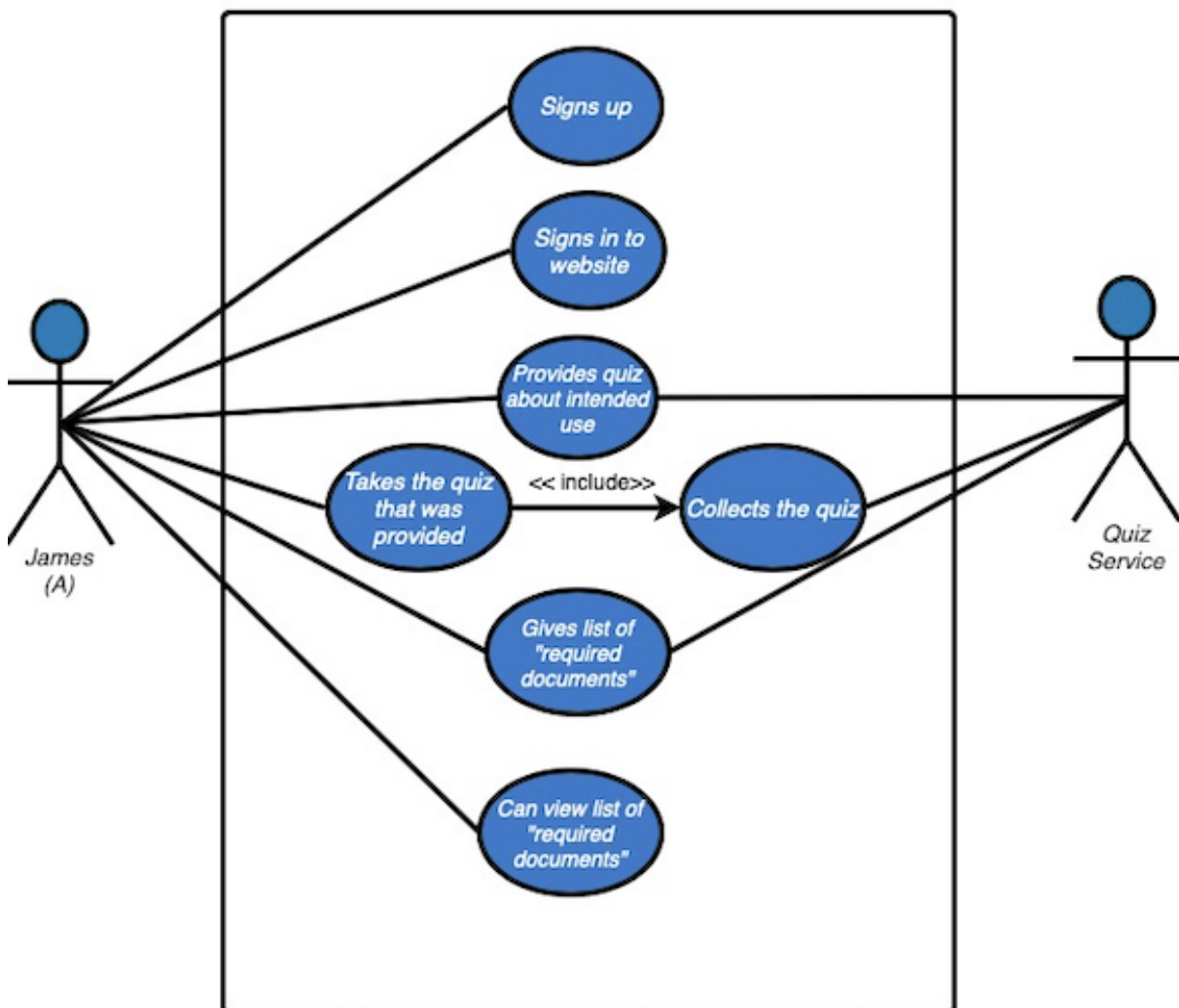
## II . Main Use Cases

i ).

Title	Take Quiz to Identify Application Requirements
Actors	James <ul style="list-style-type: none"><li>• Senior in High School</li><li>• He will be a College Freshman next year</li><li>• Has basic WWW skills</li><li>• He is well-prepared; determined.</li><li>• James as innovated person</li></ul>
Goals & Scenario	<ul style="list-style-type: none"><li>• James wants to know required documents for his college application</li><li>• Wants to make sure he is prepared for applying.</li><li>• Chooses the best university that fits him</li></ul>
Description	<p>James is a smart and hardworking student. He studies day and night to be successful in his classes. James feels excited to apply to a variety of universities for next year. He wants to know what documents will be required in the application so that he can prepare himself early for the application process. James is trying to find the necessary documents for the application by going to the university websites. But with so many universities to apply, this process is getting longer and boring. While browsing the SF State University website, he sees them using Docupaxx. After James signed up for Docupaxx, Docupaxx asked him questions regarding his intended use. James provided the necessary answers for the application to SF State University. Based on the answer to these questions, Docupaxx presented James a list of documents required to apply to SF State University. He then repeats the quiz a few more times to see what documents are required to apply to other universities.</p>

	Thanks to this process, James does not get lost on websites and uses his time better.
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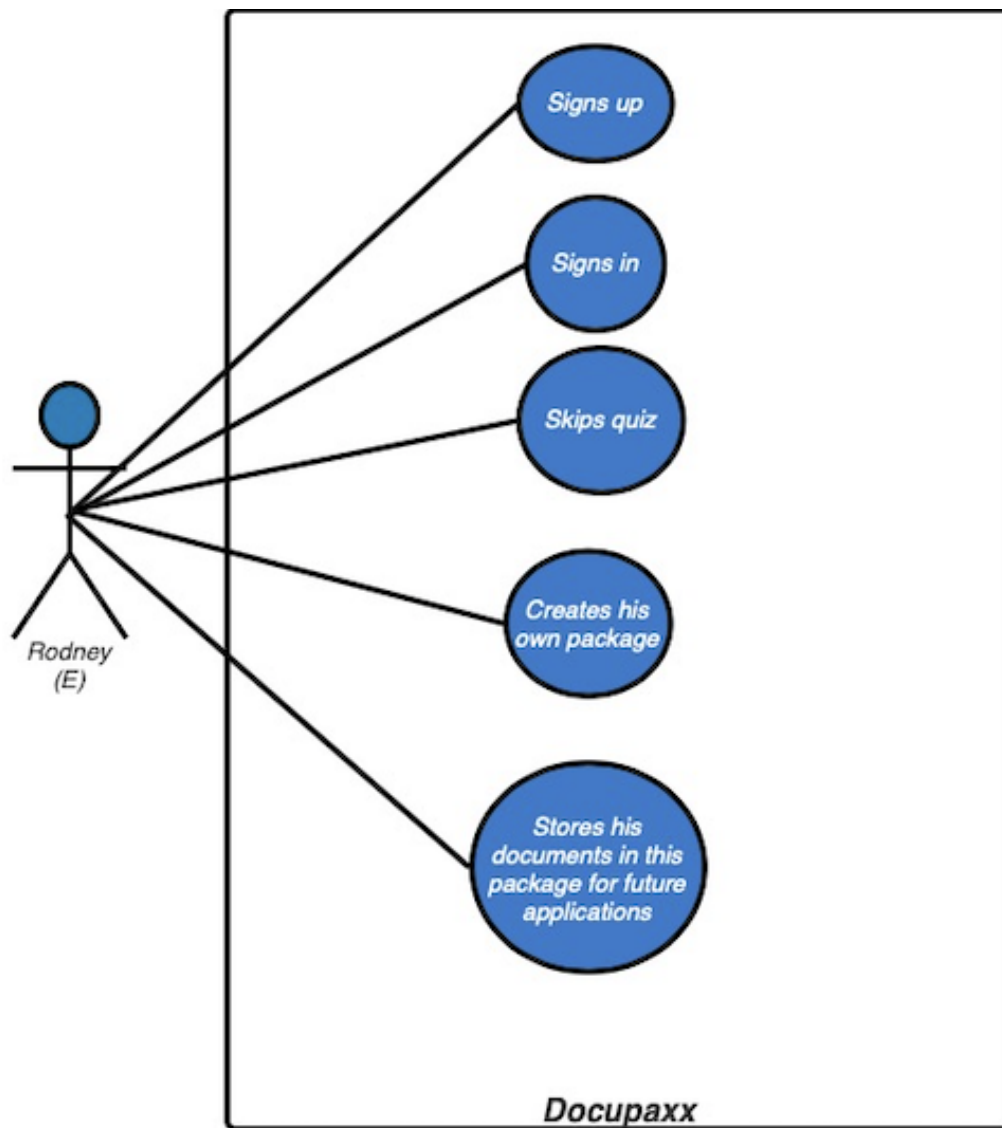
## Take Quiz to Identify Application Requirements



ii).

Title	Storage of Documents
Actors	<p>Rodney</p> <ul style="list-style-type: none"><li>• Businessman</li><li>• Very busy</li><li>• Needs to update/renew car registration</li><li>• Likes efficiency</li><li>• Tends to have trouble finding specific documents due to having many from work</li></ul>
Goals & Scenario	<ul style="list-style-type: none"><li>• He has no time to go to the DMV to update/renew car registration and wants to know an easy and quick way to complete it without digging through his hard drive each time.</li><li>• Wants to find a place to store important documents that can be used for multiple applications</li><li>• Looking for a website with a very simple interface that organizes documents</li></ul>
Description	<p>Rodney has been working hard as he takes twelve hour shifts helping people in his firm and doesn't have time to go to the dmv to change his car registration. However, Rodney realizes that everytime he needs to renew or update any of his official documents, he will need to dig through his hard drive which already stores a massive amount of different files from work. He then encounters a Docupaxx ad which highlights the simplicity of its UI and effective storage features. Seeing the ad boasting of its strengths, he goes to the website and stores his documents with Docupaxx. After he uploads his required documents to the DMV's Docupaxx team, his documents will be stored with Docupaxx for use in future applications.</p>

## Storage of Documents

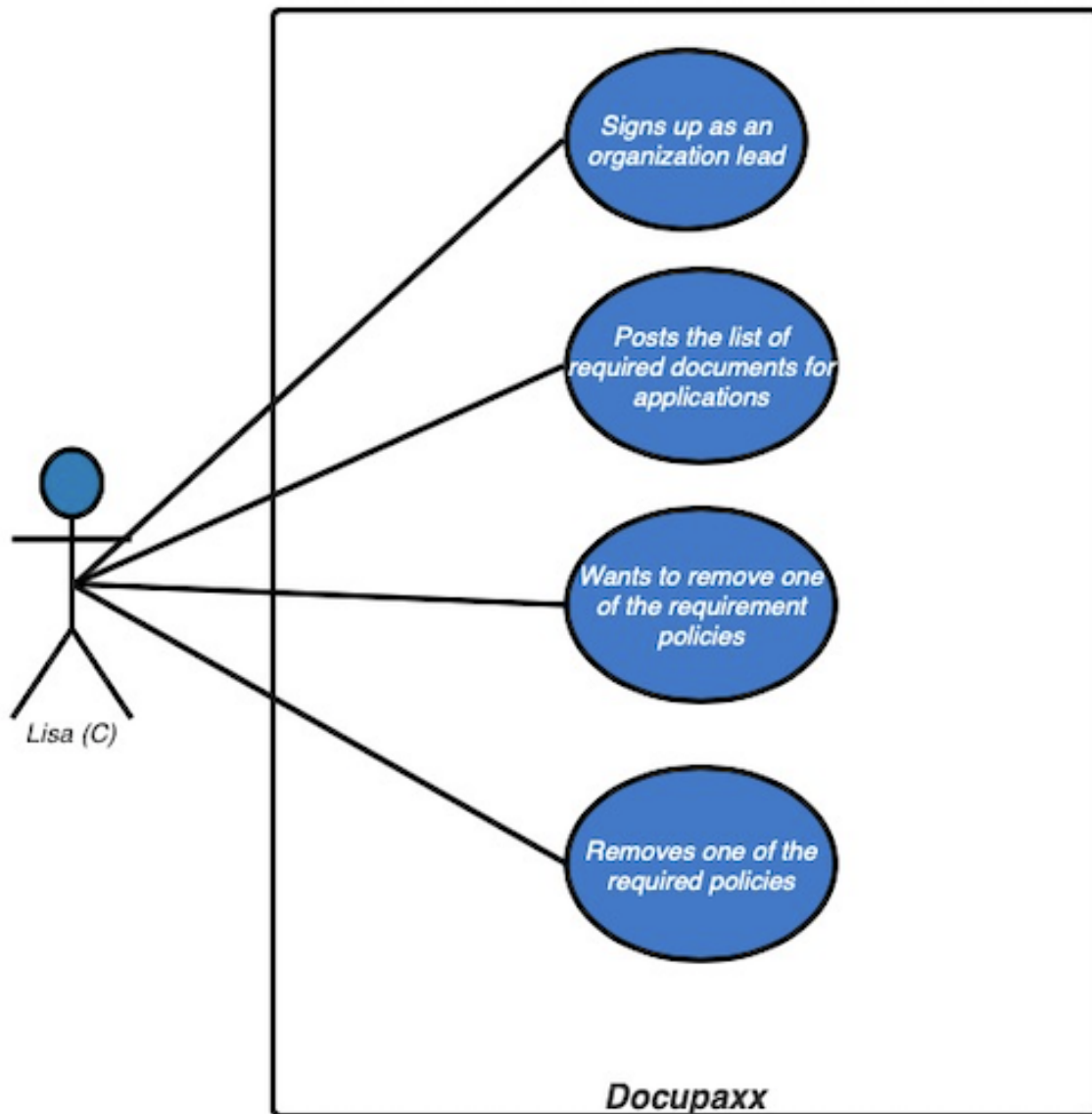


iii).

Title	Setting and Modifying Application Requirements
Actors	<p>Lisa</p> <ul style="list-style-type: none"><li>● SFSU administration officer</li><li>● works hard at her job</li><li>● is nice, understanding; a good leader</li><li>● enjoys working with efficient applications</li><li>● Representative of SFSU</li></ul>
Goals & scenario	<ul style="list-style-type: none"><li>● Lisa wants to recruit many people so she can get a raise.</li><li>● She would use any type of service that's quick and easy for her to be able to recruit many people.</li><li>● She is appointed by SFSU to be an Organizational Lead on Docupaxx.</li><li>● She needs to create a list of enrollment requirements for potential students.</li><li>● She makes a list of requirements and posts them on Docupaxx, and makes modifications as needed.</li></ul>
Description	<p>SF State University (SFSU) would like to have more revenue by enrolling more students. After discovering Docupaxx as a means of onboarding applicants, SF State joins Docupaxx and appoints Lisa to be an Organizational lead to manage the SF State team on Docupaxx. As the Organizational lead, she would be in charge of creating and maintaining a list of required documents for several types of applications. She created a list of required documents for the Fall 2020 semester. After one semester, SFSU's requirement policies changed and Lisa went back to the website and modified the required documents list for the Spring 2021 semester.</p>



## Setting and Modifying Application Requirements

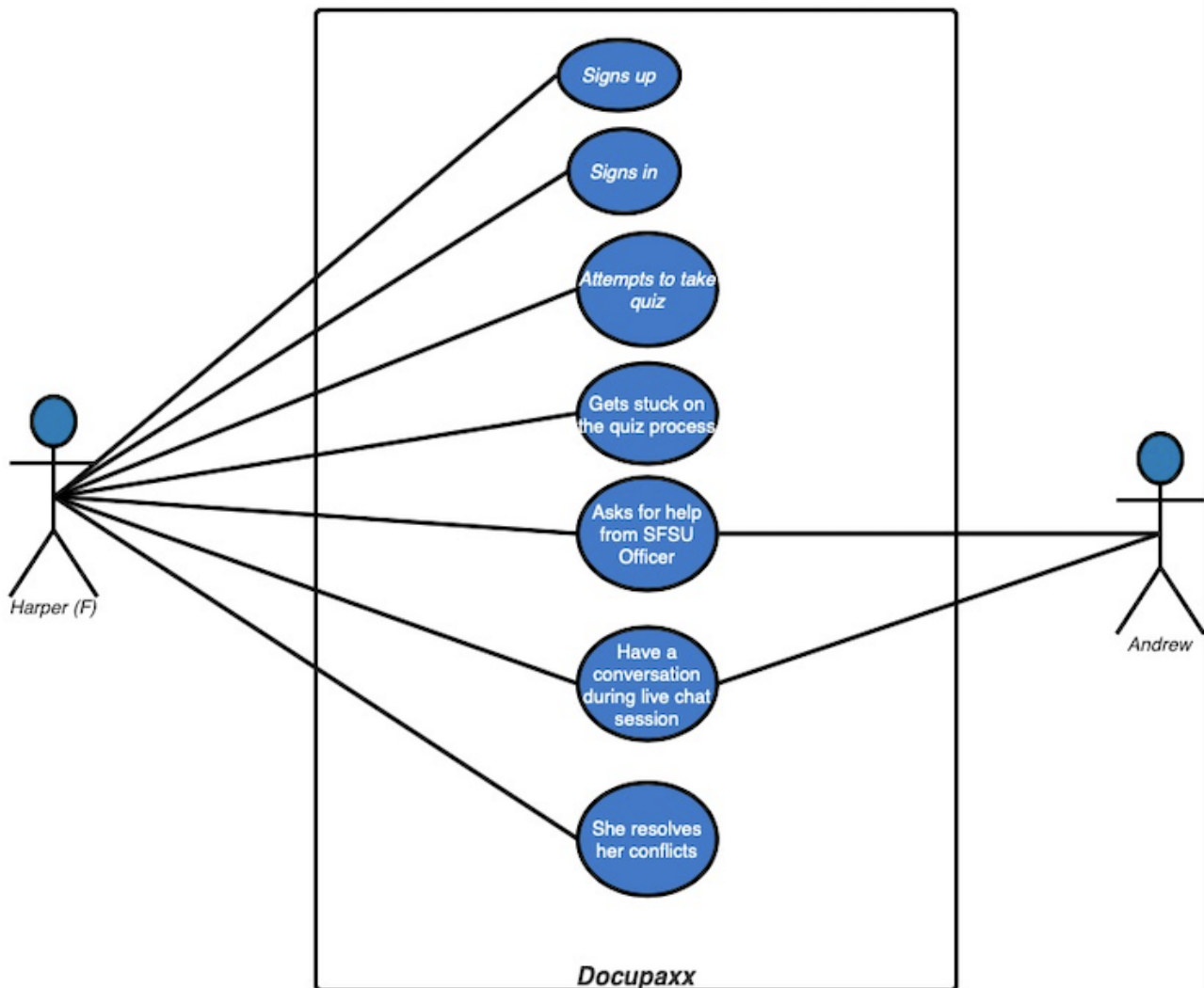


iv).

Title	Messaging / Chat
Actors	<p>Harper</p> <ul style="list-style-type: none"><li>• 22 years old</li><li>• She is an SFSU Applicant</li><li>• She is a very sociable person</li><li>• Is not afraid to ask for help</li></ul> <p>Jazmine</p> <ul style="list-style-type: none"><li>• Harper's friend, helping Harper.</li><li>• Knowledgeable with www</li><li>• Helpful</li><li>• User of Docupaxx</li></ul> <p>Andrew</p> <ul style="list-style-type: none"><li>• SFSU Administration officer</li></ul>
Goals & Scenario	<p>Harper</p> <ul style="list-style-type: none"><li>• Wants the convenience of being able to chat with someone in the company</li><li>• When onboarding Docupaxx, she needs clarification, so she asks for help.</li></ul>
Description	<p>Harper is 22 years old, and is planning to fill out required documents in order to be admitted to San Francisco State University. She talked with Jazmine and was referred to Docupaxx as it previously helped her with various issues she was having when applying. Jazmine mentioned that it was simple to navigate and was able to chat with the admissions office. Once Harper was home she opened up her computer and navigated over to Docupaxx and was greeted by a questionnaire to get started. She began to fill in the documents, but became stuck for a while before she asked for help through real-time support, a feature Docupaxx offers for its users. Harper then sent a message and got a</p>

response from Andrew, an SF State Administration officer, within a few minutes. As a result, they had a conversation, and Harper got the feedback and was able to successfully complete the documents.

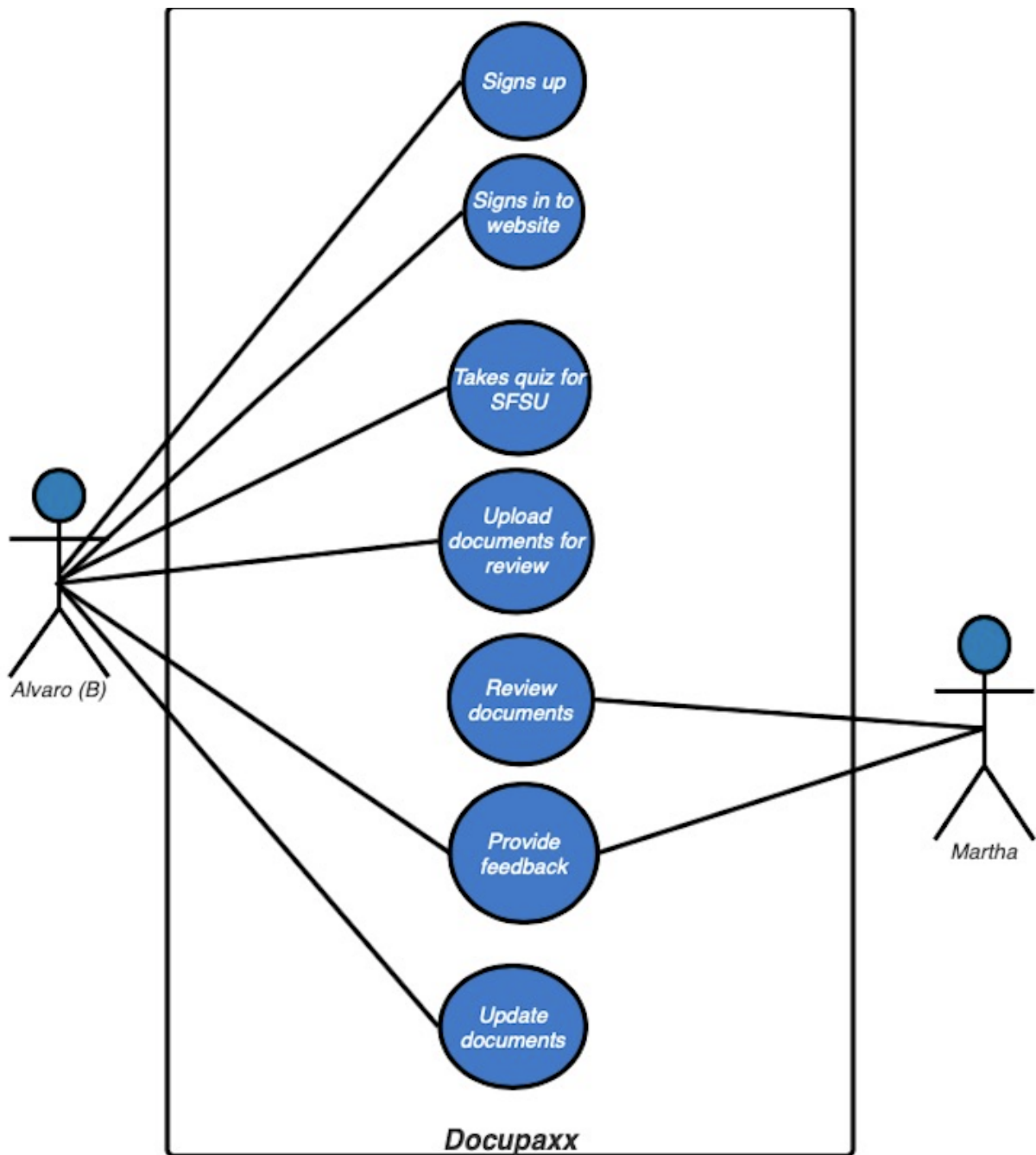
## Messaging / Chat



v).

Title	Receive Feedback for Uploaded Documents
Actors	Alvaro <ul style="list-style-type: none"><li>• Incoming transfer student</li></ul> Martha <ul style="list-style-type: none"><li>• SF State Admissions officer</li><li>• Organizational member at Docupaxx</li></ul>
Goals & Scenario	<ul style="list-style-type: none"><li>• Applicants can send their documents early for a review</li><li>• Organizations help ensure their applicants meet the requirements by providing feedbacks</li></ul>
Description	<p>SF State University, a Docupaxx partner, wants to ensure a smooth and successful onboarding process for their prospective students.</p> <p>Alvaro, excited to be transferring to SF State University in the coming semester, was quick to gather the required documents for his transfer application and sent them over to the SF State Docupaxx team a few weeks before the deadline. Martha, an Admissions Officer, reviewed his application and noticed that there was something missing -- a core GE course, and left a comment stating that. After being notified of this feedback, Alvaro realized that he sent an older version of his transcript, and was able to upload the latest version which shows that he's currently taking that class, adhering to the requirements of his transfer application.</p>

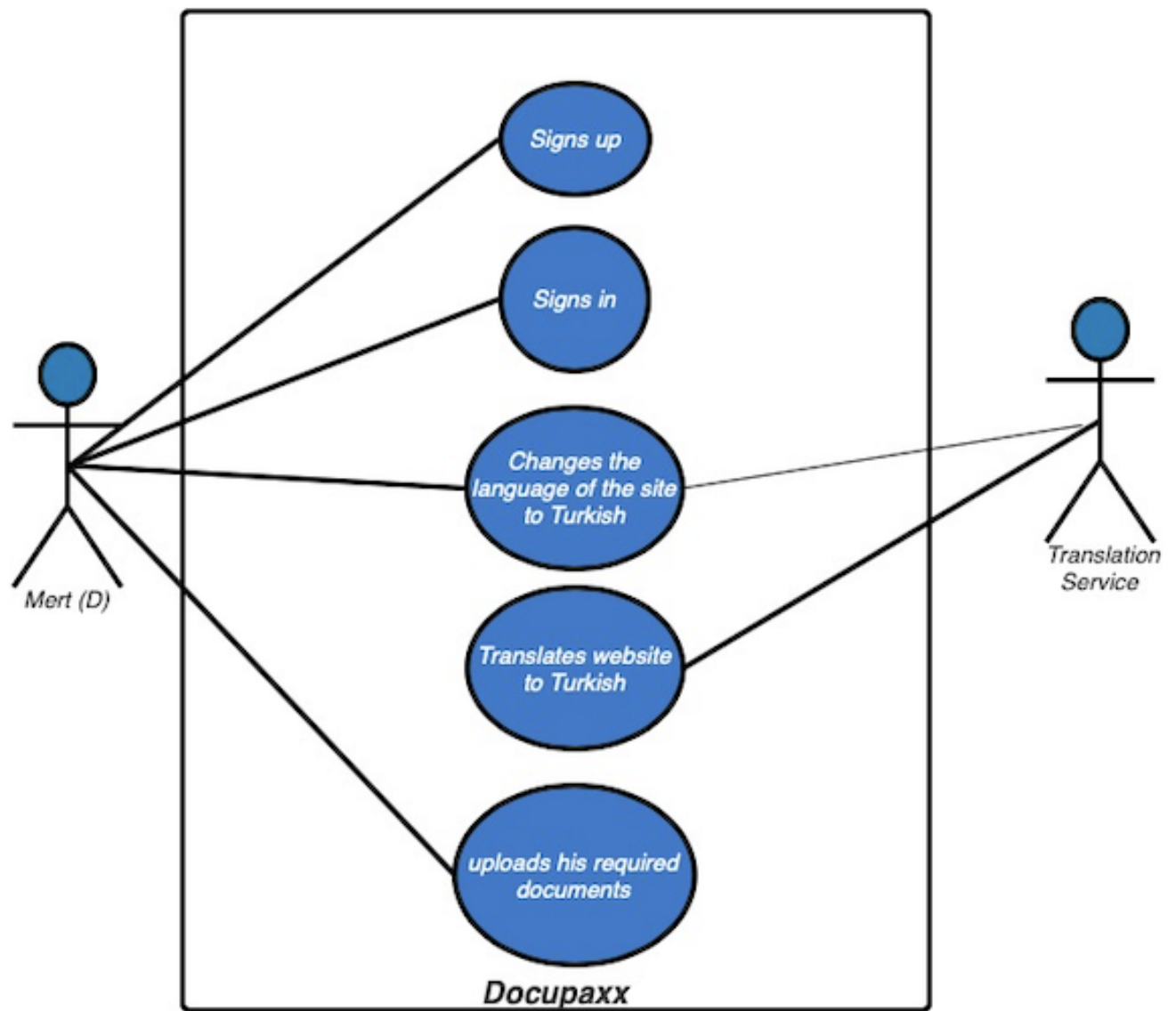
## Receive Feedback for Uploaded Documents



vi).

Title	Translation
Actors	<p>Mert</p> <ul style="list-style-type: none"><li>• Non English speaker</li><li>• He is ambitious and hardworking</li><li>• He is smart about business</li></ul>
Goals & scenario	<ul style="list-style-type: none"><li>• Mert wants to work in tech industry in Silicon Valley, which is his motivation for moving to SF</li><li>• Translated documents needed for a DMV driver license.</li><li>• He hopes to find out what kind of documents are needed from DMV only a couple clicks away by Docupaxx</li><li>• Mert finds out that Docupaxx does an amazing job of organizing required documents for any application and having them translated for non-English speakers</li><li>• After some quick actions, Mert has gotten ready to take his documents to the local DMV.</li></ul>
Description	<p>Mert recently moved to San Francisco hoping to pursue a career as a Software Developer in Silicon Valley and wanted to apply for a driver's license at the DMV, but he wasn't able to navigate their website as he doesn't know English very well. As he was browsing Facebook, he saw a Docupaxx ad mentioning that it supports multiple languages, including his native language of Turkish. After signing up, he was able to use Docupaxx services in Turkish and quickly understand what he needed for his DMV application after a few clicks.</p>

## Translation



### III. List of Main Data Items and Entities

**i. Unregistered User** - Can browse the website & check required information for applications.

**ii. Individual User** - A registered user who can upload documents to store in the database.

- Can edit and organize packages
- Can apply to the respective organization through Docupaxx.
- Requires to login/register.

**iii. Organization** - Group that posts the requirements for applications and receives packages from applicants.

- Consists of Organization Lead & Organization Members

**iv. Organization Lead** - Representative in charge of the organization.

- Can change package requirements needed to submit an application.
- Can do everything Organization Members can do.

**v. Organization Members**- Views applications sent to said organization.

**vi. Admin** - Has full access and modification powers in the database.

- Requires login/register.

**vii. Package** - Collection of documents.

- Used by registered users to apply to organizations
- Users can have personal package
- Predefined Package: Packages prepared by the organization lead

**viii. Application Package Requirements** - The list of documents needed in a package.

- Ex → {Transcript, Personal Statement, Letter of recommendation}

**ix. Comments** - Text comments given to packages for description.

- Used for feedback on submitted packages



**x. Reminders** - A notification to the user to upload their documents before the deadline.

**xi. Documents** - Confidential information files submitted by a registered user.

- Of correct file type. Ex - pdf/jpg/png/...

**xii. Quiz** - Questionnaires for determining package application requirements

**xiii. Application Type** - Represents the type of application supported by Docupaxx.

- Ex - School Enrollment, Drivers License, Job Application

**xiv. Applicant** - Represents a registered user who has sent in documents to a specific organization.

**xv. Device** - Machine used to access the webpage

## **IV. Initial List of Functional Requirements**

### **i . Unregistered User**

1. Unregistered users shall be able to register to the website and create an account.
2. Unregistered users shall be able to know what features are included on Docupaxx
3. Unregistered users shall be able to translate the website.
4. Unregistered users shall be able to see Application Package Requirements.
5. Unregistered users shall be able to navigate to an Organization's page.
6. Unregistered users shall be able to navigate to the "About" page.
7. Unregistered users shall be able to navigate to the "FAQ" page.
8. Unregistered users shall be able to navigate to the "Help" page.
9. Unregistered users shall be able to navigate to the "Privacy" page.
10. Unregistered users shall be able to send an email to an Admin via "Contact Us" page.

### **ii . Individual User**

11. Individual users shall be able to sign into the website.
12. Individual users shall be able to log out from the website.
13. Individual users shall be able to translate the website.
14. Individual users shall be able to reset passwords.
15. Individual users shall be able to create a new Package.
16. Individual users shall be able to see their own Packages.
17. Individual users shall be able to remove their own Packages.
18. Individual users shall be able to give a name to a Package.
19. Individual users shall be able to select predefined Packages.
20. Individual users shall be able to attach a Document to Packages.

21. Individual users shall be able to remove Documents from Packages.
22. Individual users shall be able to rename Packages.
23. Individual users shall be able to download any Package to the device.
24. Individual users shall be able to rename Documents.
25. Individual users shall be able to add a reminder to a Package.
26. Individual users shall be able to mark a required Document as ready.
27. Individual users shall be able to mark a Package as their favorite Package.
28. Individual users shall be able to see the preview of a Document.
29. Individual users shall be able to see when a Package is created.
30. Individual users shall be able to search between Packages by title.
31. Individual users shall be able to search between Documents.
32. Individual users shall be able to comment on their own Documents.
33. Individual users shall be able to sort Packages by filters.
34. Individual users shall be able to navigate to an Organization's page.
35. Individual users shall be able to navigate to the "About" page.
36. Individual users shall be able to navigate to the "FAQ" page.
37. Individual users shall be able to navigate to the "Help" page.
38. Individual users shall be able to navigate to the "Privacy" page.
39. Individual users shall be able to send an email to an Admin via "Contact Us" page.
40. Individual users shall be able to send a Package to an Organization.
41. Individual users shall be able to get a notification if they receive any feedback for the  
Packages they sent.
42. Individual users shall be able to edit their email address.

- 43. Individual users shall be able to send messages to the Organization Members.
- 44. Individual users shall be able to translate names of Documents.
- 45. Individual users shall be able to view Packages sent to an Organization.
- 46. Individual users shall be able to take a quiz.
- 47. Individual users shall be able to skip quiz.
- 48. Individual users shall be able to view a list of organizations.

### **iii. Organization**

- 49. An organization shall have a name.
- 50. An organization shall have an Organization Lead.
- 51. An organization shall have Organization Members.
- 52. An organization shall have it's own page.
- 53. An organization shall be able to have predefined Application Package Requirements.
- 54. An organization shall be able to receive submitted Packages.

### **iv. Organization Lead**

- 55. An Organization Lead shall be able to sign into the website.
- 56. An Organization Lead shall be able to log out from the website.
- 57. An Organization Lead shall be able to translate the website.
- 58. An Organization Lead shall be able to reset passwords.
- 59. An Organization Lead shall manage only one Organization.
- 60. An Organization Lead shall be able to invite Organization Members to the organization.
- 61. An Organization Lead shall be able to create Application Package requirements.
- 62. An Organization Lead shall be able to modify Application Package requirements.
- 63. An Organization Lead shall be able to delete Application Package requirements.

- 64. An Organization Lead shall be able to view submitted Packages.
- 65. An Organization Lead shall be able to preview Documents inside of a submitted Package.
- 66. An Organization Lead shall be able to download submitted Packages.
- 67. An Organization Lead shall be able to sort submitted Packages.
- 68. An Organization Lead shall be able to search for Package by Applicant name.
- 69. An Organization Lead shall be able to comment on submitted Packages.
- 70. An Organization Lead shall be able to send a message to an Individual user.
- 71. An Organization Lead shall be able to navigate to an Organization's page.
- 72. An Organization Lead shall be able to navigate to the "About" page.
- 73. An Organization Lead shall be able to navigate to the "FAQ" page.
- 74. An Organization Lead shall be able to navigate to the "Help" page.
- 75. An Organization Lead shall be able to navigate to the "Privacy" page.
- 76. An Organization Lead shall be able to send an email to the admins via "Contact Us" page.

#### **v . Organization Member**

- 77. Organization members shall be able to sign into the website.
- 78. Organization members shall be able to log out from the website.
- 79. Organization members shall be able to translate the website.
- 80. Organization members shall be able to reset passwords.
- 81. Organization members shall be able to view submitted Packages.
- 82. Organization members shall be able to preview documents in Packages.
- 83. Organization members shall be able to search for Packages by Applicant name.
- 84. Organization members shall be able to comment on submitted Documents.

- 85. Organization members shall be able to comment on submitted Packages.
- 86. Organization members shall be able to sort submitted Packages.
- 87. Organization members shall be able to download submitted Packages.
- 88. Organization members shall be able to see a notification if there is a new comment on a submitted Package.
- 89. Organization members shall be able to navigate to an Organization's page.
- 90. Organization members shall be able to navigate to the "About" page.
- 91. Organization members shall be able to navigate to the "FAQ" page.
- 92. Organization members shall be able to navigate to the "Help" page.
- 93. Organization members shall be able to navigate to the "Privacy" page.
- 94. Organization members shall be able to send an email to the admins via "Contact Us" page.
- 95. Organization members shall be able to send a message to an Individual User.

#### **vi. Admin**

- 96. An Admin shall be able to sign into the website.
- 97. An Admin shall be able to log out of the website.
- 98. An Admin shall be able to translate the website.
- 99. An Admin shall be able to add an Organization to the website.
- 100. An Admin shall be able to remove an Organization from the system.
- 101. An Admin shall be able to assign an Organization Lead to an Organization.
- 102. An Admin shall be able to remove an Organization Lead from an Organization.
- 103. An Admin shall be able to assign an Organization Member to an Organization.
- 104. An Admin shall be able to remove an Organization Member from an Organization.

- 105. An Admin shall be able to create a new Package.
- 106. An Admin shall be able to see their own Packages.
- 107. An Admin shall be able to remove their own Packages.
- 108. An Admin shall be able to give a name to a Package.
- 109. An Admin shall be able to select predefined Packages.
- 110. An Admin shall be able to attach a Document to Packages.
- 111. An Admin shall be able to remove Documents from Packages.
- 112. An Admin shall be able to rename Packages.
- 113. An Admin users shall be able to download any Package to the device.
- 114. An Admin shall be able to rename Documents.
- 115. An Admin shall be able to create Application Package requirements.
- 116. An Admin shall be able to modify Application Package requirements.
- 117. An Admin shall be able to delete Application Package requirements.
- 118. An Admin shall be able to create a Reminder.
- 119. An Admin shall be able to search for submitted Packages by Applicant name.
- 120. An Admin shall be able to sort submitted Packages.
- 121. An Admin shall be able to navigate to an Organization's page.
- 122. An Admin shall be able to navigate to the "About" page.
- 123. An Admin shall be able to navigate to the "FAQ" page.
- 124. An Admin shall be able to navigate to the "Help" page.
- 125. An Admin shall be able to navigate to the "Privacy" page.

## **vii. Document**

- 126. A Document shall have a title.

- 127. A Document shall be owned by an Individual User.
- 128. A Document shall have a date of upload.
- 129. A Document shall be able to have its title modified.
- 130. A Document shall be able to be previewed by an Admin.
- 131. A Document shall be able to be previewed by an Individual User.
- 132. A Document shall be able to be previewed by an Organization Lead.
- 133. A Document shall be able to be previewed by an Organizational Member.
- 134. A Document shall be able to be downloaded by an Admin.
- 135. A Document shall be able to be downloaded by an Individual User.
- 136. A Document shall be able to be downloaded by an Organization Member.
- 137. A Document shall be able to be downloaded by an Organization Lead.
- 138. A Document shall be able to be removed from the website by its owner.

#### **viii. Package**

- 139. A Package shall have a title.
- 140. A Package shall have a date of submission.
- 141. A Package shall have a date of creation.
- 142. A Package shall be able to have its title modified.
- 143. A Package shall be able to contain many Documents.
- 144. A Package shall be able to contain many Reminders.
- 145. A Package shall be able to contain zero or many Comments.
- 146. A Package shall be submitted by an Admin.
- 147. A Package shall be submitted by an Individual User.
- 148. A Package shall be able to be viewed by an Admin.



- 149. A Package shall be able to be viewed by an Individual User.
- 150. A Package shall be able to be viewed by an Organization Member upon submission.
- 151. A Package shall be able to be viewed by an Organization Leader upon submission.
- 152. A Package shall be able to be downloaded by an Admin.
- 153. A Package shall be able to be downloaded by an Individual User.
- 154. A Package shall be able to be downloaded by an Organization Member upon submission.
- 155. A Package shall be able to be downloaded by an Organization Leader upon submission.

## **ix. Message**

- 156. A message shall be able to be sent by an Admin to an Organization Member.
- 157. A message shall be able to be sent by an Admin to an Organization Lead.
- 158. A message shall be able to be sent by an Individual User to an Organization Member.
- 159. A message shall be able to be sent by an Individual User to an Organization Lead.
- 160. A message shall be able to be sent by Organization Lead to an Individual User.
- 161. A message shall be able to be sent by Organization Members to an Individual User.

## **X. Application Package Requirements**

- 162. An Application Package Requirement shall be able to be created by an Organization Lead.
- 163. An Application Package Requirement shall be able to be modified by an Organization Lead.
- 164. An Application Package Requirement shall be able to be created by an Admin.
- 165. An Application Package Requirement shall be able to be modified by an Admin.

166. An Application Package Requirement shall contain many Documents.

## **XI. Reminders**

167. A Reminder shall have a title.

168. A Reminder shall have a due date.

169. A Reminder shall be created by an Individual User.

170. A Reminder shall be created by an Admin.

171. A Reminder shall be able to be linked to a Package.

## **V . List of Non-Functional Requirements**

### **i . System requirements**

1. Minimum specs: Windows 7 or later/ MacOS 10.1 or later, 2GB of RAM, Intel-core i3 or above/ Ryzen 3 or above
2. Recommended specs: 4GB of RAM, Intel-core i5 or above/ Ryzen 5 or above

### **ii . Storage**

3. Document shall only be stored with signed-up account
4. Document size shall not exceed 1GB (depends on how much storage we give for each user account)

### **iii . Security**

5. Personal documents uploaded shall be protected from other users' access
6. Personal documents uploaded shall be protected from ransomware
7. Personal information shall comply under certain Organization's regulations
8. Personal documents shall comply under certain Organization's regulations
9. Access permissions shall only be changed by system's admin
10. Login shall require user name/email and password

- 11. Password needs to have at least one special character
- 12. Password needs to have at least one numeric character
- 13. Password needs to satisfy the length of 10 characters
- 14. Inactivity timeouts shall be activated 30 minutes after an inactivity countdown
- 15. Inactivity countdown shall be activated if there is no interaction after 15 minutes
- 16. All communications in application shall be encrypted

#### **iv . Marketing**

- 17. Logo of company shall be displayed in every page of the website
- 18. Name/Logo of the company shall be on any platform of social media

#### **v . Content**

- 19. Information about required documents shall be visible and accessible by user
- 20. Website shall have quick search bar to find organizations
- 21. Uploaded documents shall be able to access by user owner
- 22. Ability to review and change user information shall be available under user profile
- 23. Website shall provide company's information under FAQ
- 24. Website shall state refund policy on the bottom of each page

- 25. Website shall state privacy policy on the bottom of each page
- 26. Company contact information option shall be available on the bottom of each page
- 27. Live chat between user and customer service department shall be available in each page
- 28. Ability to submit a request shall be available on the bottom of each page
- 29. Ability to email to the company directly from the website shall be available

#### **vi . Compatibility**

- 30. Website shall be compatible with Google Chrome version...
- 31. Website shall be compatible with Firefox version
- 32. Website shall be compatible with Safari version...
- 33. Website shall be compatible with iOS
- 34. Website shall be compatible with Android

#### **vii . Privacy**

- 35. Personal documents shall be uploaded to the Website
- 36. Personal documents shall only be managed by user account (meaning nobody can access except the owner)
- 37. Personal documents shall be uploaded by user with signed-up account

38. Required documents from different organizations shall be check marked only when user already have that documents uploaded in their account

39. Personal documents shall be uploaded by user with stable internet connection to prevent data leak or any error

40. Data shall be deleted if documents are half uploaded

### **viii. Reliability**

41. Required documents shall be up-to-date with each organization's information

42. Required documents shall be translated for non-English users

### **ix. Usability**

43. Information from specific organization shall be viewed after being searched

44. Specific required documents shall be verified once user has uploaded their documents

45. User interface shall be in simple and clean design

46. User interface shall be straightforward under categories

47. User interface shall allow users for easy access to find what they want to look for

48. If accessed on computer, system shall require necessary hardware like mouse and keyboard

49. If accessed on phone, system shall require virtual keyboard

50. Spellings shall be precise in order to access information

## **x . Performance**

- 51. System shall result information after search within certain speed (.1ms)
- 52. Personal data shall be accessed after user login within certain speed (.1ms)
- 53. Browser refresh times shall not take longer than 2s
- 54. System shall detect uploaded documents within a certain amount of time
- 55. Query shall take no longer than 1s

## **xi. Portability**

- 56. Website shall be accessible on any electronic device
- 57. Website shall be accessible from a browser

## **xii. Capacity**

- 58. Document shall be uploaded one at a time
- 59. System shall handle next document after finished storing the previous one
- 60. System may handle more than one file at a time in the future
- 61. System shall be able to handle thousands of users at a time

## **xiii. Maintainability**

- 62. System shall apply coding standards

63. System shall maintain best practices

64. System shall follow design standards

#### **xiv. Recoverability**

65. Recovery process shall take no longer than 24 hours

66. Backup frequencies shall be executed every month

#### **xv. Availability**

67. Technical supports shall be available 24/7

68. Website maintenance message shall be stated on top of the main page 48 hours prior

69. Technical supports shall be available in certain amount of hours during holidays

70. Connection requirement shall be considered stable at 15mbps or above

71. Upload speed shall be considered functional at 1mbps or above

#### **xvi. Audit**

72. System must maintain full traceability of information from organizations

73. Required documents shall require audit properly

74. A file to upload shall always have a name

75. A file to upload shall take up storage space



76. A file to upload shall satisfy proper extension (PDF...)

77. Unsuccessful attempt to upload shall be recorded by audit performance

78. Export documents shall always be audited

79. Import documents shall always be audited

80. Privacy of user information shall always be audited

### **xvii. Scalability**

81. The system shall be able to support thousands more new users in the next year

82. The solution shall be able to expand storage 10% of storage in the next year

83. The solution shall be able to support more than one file uploaded at a time in the next year

84. The solution shall be able to reach out more than 10% of total current organizations every year

## VI. Competitive Analysis

Feature/ Company	Our Company: <b>Docupaxx</b>  (Planned Aspects)	Competitor 1: <b>Google Drive</b>	Competitor 2: <b>Common App</b>	Competitor 3: <b>Dropbox</b>	Competitor 5: <b>Hightail</b>	Competitor 6: <b>Bit.AI</b>
<b>Strengths</b>	Convenient and efficient interface, with real-time technical support.	Efficient user interface.	User interface functionality is efficient.	Focus revolves around user's data.	Functionality accustomed to users.	Great design, integratable.
<b>Weaknesses</b>	Low name-recognition.	Potential attack on vulnerable accounts.	Does not offer full support of information.	Lack of user customizable functionality.	Confusing interface to new users; sporadic social media.	Lack of functionality for unpaid users.
<b>Pricing</b>	Up to \$5 per month.	Up to \$10 per month.	\$50 per application.	Up to \$20 per month. Up to 3 users per account.	Up to \$36 per month.	Up to \$15 per month.
<b>Social Media</b>	Twitter, Blog posts, Instagram, Snapchat, Facebook	Twitter, Blog posts	Twitter, Blog posts, Instagram	Twitter, Blog posts, Instagram	Twitter, Blog posts, Instagram	Twitter, Blog posts, Instagram
<b>Onboarding experience</b>	Straightforward instructions with few. web pages to verify.	Straightforward registration instructions.	Straightforward sign-up, confusing navigation thereafter.	Straightforward registration, auto downloads.	Straightforward registration, few steps to verify.	Straightforward registration, but involving many steps and verification.

Feature/ Company	Our Company: <b>Docupax</b> x (Planned)	Competitor 1: <b>Google Drive</b>	Competitor 2: <b>Common App</b>	Competitor 3: <b>Dropbox</b>	Competitor 5: <b>Hightail</b>	Competitor 6: <b>Bit.AI</b>
<b>Making Updatable To Do List of Required Documents for an Organizatio n</b>	+	-	+	-	-	-
<b>Organizing Documents</b>	++	+	-	+	+	+
<b>Derives Required Document List for an Organizatio n with Quizzes  (Superior Feature)</b>	++	-	-	-	-	-
<b>Translation of Organized Documents</b>	+	+	-	-	-	-
<b>Real-Time Chat with Organizatio n Representa tive (not Technical Support)</b>	++	-	-	-	-	-

## **SUMMARY:**

Of all the competitors researched, Docupaxx's planned advantages would be that not only will we store documents and applications, but the files are organized and can also be sent straight to the Organization's Docupaxx Team for review. To improve organization, Docupaxx plans to use Packages to hold documents and allow editing multiple documents from a single location. Also, being able to send the required documents straight to an Organization's Docupaxx account is a convenient asset for the user, a feature that our competitors do not have. As to what products are already available, most of our competitors have efficient features that make storing and retrieving documents simple, reducing confusion and frustration, which is also what Docupaxx is trying to achieve and improve. Another planned advantage our project intends to use to attract more users would be the use of a straightforward quiz feature. The fact that the user does not have to leave our website in order to find multiple organizations' application requirements as they're automatically fed the list of documents required is an uncommon and superior feature that will greatly reduce excessive browsing on multiple sites. In addition, the real time chat feature with the Organizations team is more superior than other apps as they give punctual feedback when a user needs clarification rather than waiting a few hours or days for a response. Presenting the documents to be used in the application in To-Do lists will enable the users to follow step-by-step what they need. Once users complete this list, they will be sure that they have collected all the files required for the application. We plan to improve the convenience and design of the To Do Lists, for better user experience. In this way, they will not have any surprises about missing documents in their application. And with Google's easy-to-use Translation API, Docupaxx will be able to provide these services to users from all over the world!

## **VII. High-level System Architecture and Technologies**

**Server Host:** AWS 1vCPU 1GB RAM

**Operating System:** Ubuntu 20.04

**Database:** MySQL 8.0.23

**Web Server:** NGINX 1.18.0

**Server-Side Language:** JavaScript

**Additional Technologies:**

**Web Framework:** React 17.0.1

**JS Framework:** Node 10.19.0

**IDE:** VSCode, Webstorm

**MySQL Workbench:** Workbench 8.0.21 - 8.0.23

## VIII. Team Contributions

### Kyle:

- Facilitated Team Meetings for Executive Summary
- Facilitated Team Meetings for Use Cases
- Facilitated Team Meetings for M1 Review
- Helped and Contributed to Competitive Analysis
- Reviewed and gave feedback for Chapters 1-6
- Prompted all team members for feedback on all chapters
- Primary Contributor to Team Contributions and Checklist
- Appointed Github Master and M1 Editor

### Can:

- Co-Primary Contributor to Functional Requirements
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #1 with Live Feedback)
- Co-Constructed Use Case Diagrams with Feedback
- Edited Use Cases with Feedback
- Applied Feedback to Functional Requirements
- Did Workshop on editing Chapter 3, 4, 5 with feedback
- Reviewed and gave feedback to all chapters

### Amron:

- Co-Primary Contributor to Functional Requirements
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #2 with Live Feedback)
- Co-Constructed Use Case Diagrams with Feedback
- Edited Use Cases with Feedback
- Did Workshop on editing Chapter 3, 4, 5 with feedback
- Reviewed and gave feedback to all chapters

### Vi:

- Primary Contributor to Non-Functional Requirements
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #4 with Live Feedback)
- Co-Constructed Use Case Diagrams with Feedback
- Edited Use Cases with Feedback
- Reviewed and gave feedback to all chapters

**Anna:**

- Primary Contributor to Competitive Analysis
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #3 with Live Feedback)
- Reviewed and gave feedback to all chapters

**Rodrigo:**

- Primary Contributor to M1 Document Maintenance (M1 Editor)
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #6 with Live Feedback)
- Reviewed and gave feedback to all chapters

**Janson:**

- Primary Contributor to Data Items and Entities
- Contributor to Executive Summary
- Contributor to Use Cases (Primary Contributor to Case #5 with Live Feedback)
- Did Workshop on Chapter 3, 4, 5 with feedback
- Reviewed and gave feedback to all chapters

## IX. Checklist

Item	Status
Team found a time slot to meet outside of the class	<b>DONE</b>
Github master chosen	<b>DONE</b>
Team decided and agreed together on using the listed SW tools and deployment server	<b>DONE</b>
Team ready and able to use the chosen back and front end frameworks and those who need to learn are working on learning and practicing	<b>ON TRACK</b>
Team lead ensured that all team members read the final M1 and agree/ understand it before submission	<b>DONE</b>
Github organized as discussed in class (e.g. master branch, development branch, folder for milestone documents etc.)	<b>DONE</b>

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