TEAMDUTY Web-application

Software Requirement Specification

By

Mr. Manuchet Manoi 542115049
Mr. Saknarong Noipaksa 542115061

Department of Software Engineering
College of Arts, Media and Technology
Chiang Mai University

Project Advisor

_____

Aj. Jayakrit Hirisajja

Document History

Document Name	Version	Status	Date	Viewable	Reviewer	Responsible
Documents						
TEAMDUTY - Web application - SRS v 0.1.docx	**Add Chapter 1** - Objective - Intended Audience and Reading Suggestions - Project Scope	Draft	01 May 2014	MM, SN,JH	MM, SN	MM, SN
TEAMDUTY - Web application - SRS v 0.1.docx	**Add Chapter 2** - Product Perspective - Product Features - User Classes and Characteristics - Operation Environment - Design and Implementation Constraints **Add Chapter 3** -User requirement **Add Chapter 5** -Traceability Record	Draft	01 May 2014	MM, SN,JH	MM, SN	MM, SN
TEAMDUTY - Web application - SRS v 0.2.docx	**Adjust Chapter 3** -Approve URS & SRS	Draft	06 May 2014	MM, SN,JH	MM, SN	MM, SN
TEAMDUTY - Web application - SRS v 0.3.docx	**Add Chapter 4** -Software Requirement Specification -Use case Description & Activity Diagram -Quality Requirement	Draft	08 May 2014	MM, SN,JH	MM, SN	MM, SN
TEAMDUTY - Web application - SRS v 0.3.docx	**Adjust Chapter 4** -Software Requirement Specification -Use case Description & Activity Diagram -Quality Requirement	Draft	06 July2014	MM, SN,JH	MM, SN	MM, SN
TEAMDUTY - Web application - SRS v 1.0.docx	**Adjust Chapter 4** -Use case Description	Draft	21 July2014	MM, SN,JH	MM, SN	MM, SN

***MM = Manuchet Manoi**

***SN = Saknarong Noipaksa**

***JH = Jayakrit Hirisajja**

Table of Contents

Chapter One | Introduction....4
1.1 Objective....4
1.2 Intended Audience and Reading Suggestions....4
1.2.1 Intended Audience....4
1.2.2 Reading Suggestions....4
1.3 Project Scope....5
Chapter Two | Overall Description....6
2.1 Product Perspective....6
2.2 User Classes and Characteristics....6
2.3 Operation Environment....7
2.4 Design and Implementation Constraints....7
Chapter Three | User Requirement....8
Chapter Four | System Feature....10
4.1 Software Requirement Specification....10
4.2 Use case Description & Activity Diagram....16
4.2.1 Use case Description and Activity Diagram....16
4.3 Quality Requirement....63

Chapter One | Introduction

1.1 Objective

The Objective of this (SRS) Software requirement specification is establish requirement for TEAMDUTY Web application and show all of description and specification of TEAMDUTY Web application. And this Software requirement specification is guidelines for develop software correctly and match with requirement.

1.2 Intended Audience and Reading Suggestions

1.2.1 Intended Audience

Development team

- Software Requirement specification help Development team understand the scope of the project and detail of software before implementation.
- Software Requirement specification help development team develop program efficiently.
- Software Requirement specification help development team can check software product that match with requirement of program or not.

User

- Software requirement specification will help the user to know detail and description of software product.
- User can check that the requirements in software requirement specification match with their requirement or not.
- Software requirement specification help user and development understand in program corresponding

1.2.2 Reading Suggestions

This software requirement specification will classify requirements by user into 3 type including **service request customer**, **freelance supply** and **Administrator**. And for each progress we will separated to send in each progress as followed;

Submit on-	**User Requirement specification of-**
May	Feature 1 # Account Management System Feature 2 # Service request customer management system.
July	Feature 3 # Search system Feature 4 # Software-freelance supply management system Feature 5 # Communication system
September	Feature 6 # Verification system Feature 7 # Admistrator Management system

1.3 Project Scope

The scope of this software requirement speciation is strategies to establish the system that:

- The Software System is Web-application.
- The Software System provide only software side.
- The Software System divide to two main part of user that is software human resource, and software job auction project.
- Show requirement and detail of Software system

TEAMDUTY – web application is a website application. This will provide a system to manage about software freelance finding job software human resource.

Chapter Two | Overall Description

2.1 Product Perspective

TEAMDUTY – Web application to contract both of Software freelancer and Software employer. The application provides feature help Software freelancer to find software job. And help Software employer to find Software human resource in software project.

2.2 User Classes and Characteristics

There are 3 type of user, which interact to TEAMDUTY-web application system. That is **service request customer, freelance supply** and **Administrator** (this is only URS in feature 1)

Service request customer

E-URS – 01: *service request customer* can be Register and select type of user as *service request customer*

E-URS – 02: *service request customer* can be ConfirmRegister in their Email that they input on previously

E-URS – 03: *service request customer* can be Login to use Web Application after get user account.

E-URS – 04: The *service request customer* can manage to add or edit Picture, Name, Company name, Address, Introduce yourself, and Telephone number in profile detail as *service request customer*.

E-URS – 05: *service request customer* can be Logout from web application

E-URS – 06: *service request customer* can be ask their password form system if they forgot

E-URS – 07: The ***service request customer*** can post job and Detail as Project Name, Budget, Information, skill required and Software role categories to system that show to both of user as *service request customer* and *freelance supply*.

E-URS – 08: The ***service request customer*** can view Picture Name, Skill, and Address, Introduce yourself, Software role category, Fax and Telephone number in Profile detail of freelancer.

E-URS – 09: The ***service request customer*** can view posted job list in system.

E-URS – 10: The ***service request customer*** can view list of bidder in each project include budget & bidding detail

E-URS – 11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project

Freelance supply

F-URS – 01: *freelance supply* can be Register and select type of user as *freelance supply*

F-URS – 02: *freelance supply* can be ConfirmRegister in their Email that they input on previously

F-URS – 03: *freelance supply* can be Login to use Web Application after get user account.

F-URS – 04: *freelance supply* can manage to Add or Edit Picture Name, Skill, Address, Introduce yourself, and Telephone number in Profile detail as *freelance supply*.

F-URS – 05: *freelance supply* can be Logout from web application

F-URS – 06: *freelance supply* can be ask their password form system if they forgot

2.3 Operation Environment

Notebook or PC

Processor:	Intel(R) Core(TM) i7-3630QM CPU @ 2.40GHz 2.40 GHz
Installed memory (RAM):	4.00 GB (3.89 GB usable)
System type:	64-bit Operating System

Browser

- Google Chrome
- Firefox

2.4 Design and Implementation Constraints

Internet Connection is required of use TEAMDUTY-Web application

- 1 email can be only used to register for 1 account.

Chapter Three | User Requirement

User is a person using a generic system. There are 3 type of user, which interact to Team Duty Web application system is **Service request customer**, **freelance supply** and **Administrator**. We will be separated in each feature.

Feature #1 - Account management system.

Service request customer

E-URS – 01: *service request customer* can be Register and select type of user as *service request customer*

E-URS – 02: *service request customer* can be ConfirmRegister in their Email that they input on previously

E-URS – 03: *service request customer* can be Login to use Web Application after get user account.

E-URS – 04: The *service request customer* can manage to add or edit Picture, Name, Company name, Address, Introduce yourself, and Telephone number in profile detail as *service request customer*.

E-URS – 05: *service request customer* can be Logout from web application

E-URS – 06: *service request customer* can be ask their password form system if they forgot

Freelance supply

F-URS – 01: *freelance supply* can be Register and select type of user as *freelance supply*

F-URS – 02: *freelance supply* can be ConfirmRegister in their Email that they input on previously

E-URS – 03: *freelance supply* can be Login to use Web Application after get user account.

F-URS – 04: *freelance supply* can manage to Add or Edit Picture Name, Skill, Address, Introduce yourself, and Telephone number in Profile detail as *freelance supply*.

F-URS – 05: *freelance supply* can be Logout from web application

F-URS – 06: *freelance supply* can be ask their password form system if they forgot

Feature #2 - Service request customer management system.

Service request customer

E-URS – 07: The ***service request customer*** can post job and Detail as Project Name, Budget, Information, skill required and Software role categories to system that show to both of user as *service request customer* and *freelance supply*.

E-URS – 08: The ***service request customer*** can view Picture Name, Skill, and Address, Introduce yourself, and Telephone number in Profile detail of freelancer.

E-URS – 09: The ***service request customer*** can view posted job list in system.

E-URS – 10: The ***service request customer*** can view list of bidder in each project include budget & bidding detail

E-URS – 11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project

Chapter Four | System Feature

4.1 Software Requirement Specification

Feature #1 account management system.

Service request customer in feature#1 Account management system

E-URS – 01: *service request customer* can be Register and select type of user as *service request customer*

E-URS – 02: *service request customer* can be ConfirmRegister in their Email that they input on previously

E-URS – 03: *service request customer* can be Login to use Web Application after get user account.

E-URS – 04: The ***service request customer*** can manage to add or edit Picture, Name, Company name, Address, Introduce yourself, Fax and Telephone number in profile detail as *service request customer*.

E-URS – 05: *service request customer* can be Logout from web application

E-URS – 06: *service request customer* can be ask their password form system if they forgot it.

E-URS – 01: *service request customer* can be Register and select type of user as *service request customer*

SRS 01- The system shall provide the UI which receive type of user, email, Password and ConfirmPassword.
SRS 02 - The system shall check the email format type.
SRS 03 - The system shall check the password format. The password format must be 6-20 characters.
SRS 04 - The system shall check the matching of password and confirm password.
SRS 05 - The system shall send link and ConfirmPassword to *service request customer* email
SRS 06 - The system shall display error message “Email does not valid”
SRS 07 - The system shall display the error message “The password length must be between 6-20”
SRS 08 - The system shall display the error message “The password and confirm password does not match”
SRS 09 - The system shall connect to database

E-URS – 02: *service request customer* can be ConfirmRegister in their Email that they input previously

SRS 10- The system shall provide the UI which receive ConfirmRegisterCode
SRS 11 - The system shall add new user to database using username
SRS 12 - The system shall display the error message "The ConfirmRegisterPassword is wrong"
SRS 09 - The system shall connect to database

E-URS – 03: *service request customer* can be Login to use Web Application after get user account.

SRS 13 - The system shall provide login interface which receive username (email) and password.
SRS 14 - The system shall validate username and password which matched with database.
SRS 15 - The system shall display the error message. "Error, the username and password is not correct".
SRS 07 - The system can check the password format. The password format must be 6-20 characters.
SRS 09 - The system shall connect to database

E-URS – 04: The ***service request customer*** can manage to add or edit Picture, Name, Company name, Address, Introduce yourself, Fax and Telephone number in profile detail as *service request customer*.

SRS 16- The system shall provide user interface for receive name, address, company name, Address, Introduce yourself, Fax and Telephone number
SRS 17- The system shall provide button to browse the logo/picture.
SRS 18- The system shall allow user to edit or add the profile.
SRS 19- The system shall record profile information to database.
SRS 09- The system shall connect to database

E-URS – 05: *service request customer* can be Logout from web application

SRS 20- The system shall provide logout interface for logged out the system.
SRS 21- The system shall log username (email) and password out of the system.

E-URS – 06: *service request customer* can be ask their password form system if they forgot it.

SRS 22- The system shall provide user interface for receive Email and ComfirmPassword
SRS 02 - The system shall check the email format type.
SRS 06 - The system shall display error message "Email does not valid"
SRS 12 - The system shall display the error message "The ConfirmRegisterPassword is wrong"
SRS 09- The system shall connect to database

freelance supply in feature#1 Account management system

F-URS – 01: *freelance supply* can be Register and select type of user as *freelance supply*

F-URS – 02: *freelance supply* can be ConfirmRegister in their Email that they input on previously

F-URS – 03: *freelance supply* can be Login to use Web Application after get user account.

F-URS – 04: *freelance supply* can manage to Add or Edit Picture Name, Skill, Address, Introduce yourself, Software Job Categories, Fax and Telephone number in Profile detail as *freelance supply*.

F-URS – 05: *freelance supply* can be Logout from web application

F-URS – 06: *freelance supply* can be ask their password form system if they forgot it.

F-URS – 01: *freelance supply* can be Register and select type of user as *freelance supply*

SRS 01- The system shall provide the UI which receive type of user, email, Password and ConfirmPassword.
SRS 02 - The system shall check the email format type.
SRS 03 - The system shall check the password format. The password format must be 6-20 characters.
SRS 04 - The system shall check the matching of password and confirm password.
SRS 23 - The system shall send link and ConfirmPassword to *freelance supply* email
SRS 06 - The system shall display error message “Email does not valid”
SRS 07 - The system shall display the error message “The password length must be between 6-20”
SRS 08 - The system shall display the error message “The password and confirm password does not match”
SRS 09 - The system shall connect to database

F-URS – 02: *freelance supply* can be ConfirmRegister in their Email that they input on previously

SRS 10- The system shall provide the UI which receive ConfirmRegisterCode
SRS 11 - The system shall add new user to database using username
SRS 12 - The system shall display the error message “The ConfirmRegisterPassword is wrong”
SRS 09 - The system shall connect to database

F-URS – 03: *freelance supply* can be Login to use Web Application after get user account.

SRS 13 - The system shall provide login interface which receive username (email) and password.
SRS 14 - The system shall validate username and password which matched with database.
SRS 15 - The system shall display the error message. “Error, the username and password is not correct”.
SRS 07 - The system can check the password format. The password format must be 6-20 characters.
SRS 09 - The system shall connect to database

F-URS – 04: The *freelance supply* can manage to Add or Edit Picture Name, Skill, Address, Introduce yourself, Software job categories, Fax and Telephone number in Profile detail as *freelance supply*.

SRS 24- The system shall provide user interface for receive name, address, company name, Address, Introduce yourself, Software job categories, Fax and Telephone number
SRS 17- The system shall provide button to browse the logo/picture.
SRS 18- The system shall allow user to edit or add the profile.
SRS 19- The system shall record profile information to database.
SRS 09- The system shall connect to database

F-URS – 05: *freelance supply* can be Logout from web application

SRS 20- The system shall provide logout interface for logged out the system.
SRS 21- The system shall log username (email) and password out of the system.

E-URS – 06: *freelance supply* can be ask their password form system if they forgot it.

SRS 22- The system shall provide user interface for receive Email and ComfirmPassword
SRS 02 - The system shall check the email format type.
SRS 06 - The system shall display error message “Email does not valid”

Feature #2 enterprise management system.

E-URS – 07: The ***service request customer*** can post job and Detail as Project Name, Budget, Information and skill required to system that show to both of user as *service request customer* and *freelance supply*.

E-URS – 08: The ***service request customer*** can view Picture Name, Skill, and Address, Introduce yourself, Software role category, Fax and Telephone number in Profile detail of freelancer.

E-URS – 09: The ***service request customer*** can view another job list in system.

E-URS – 10: The ***service request customer*** can view list of bidder in each project include budget & bidding detail

E-URS – 11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project

E-URS – 07: The ***service request customer*** can post job and Detail as Project Name, , InitialBudget , finalBudget, Information, skill required and software job category to system that show to both of user as *service request customer* and *freelance supply*.

SRS 25 - The system shall provide user interface for receive Project Name, InitialBudget , finalBudget ,Project Detail, skill required and software role category to system
SRS 26 - The system shall record job's information to database
SRS 09 - The system shall connect to database

E-URS – 08: The ***service request customer*** can view Picture Name, Skill, and Address, Introduce yourself, Software role category, Fax and Telephone number in Profile detail of freelancer.

SRS 27 - The system shall display information of freelancer include Picture Name, Skill, and Address, Introduce Yourself, Software role category, Fax and Telephone number
SRS 09 - The system shall connect to database.

E-URS – 09: The ***service request customer*** can view posted job list in system.

SRS 28 - The system shall display job information include Project Name, Budget, Project Detail, skill required and software role category
SRS 09 - The system shall connect to database.

E-URS – 10: The ***service request customer*** can view list of bidder in each project include bidId, budget, bidding detail **,** link to Freelancer profile and button to request freelancer

SRS 29 - The system shall display list of bid information below job information bidId, budget, bidding detail **,** link to Freelancer profile and button to request freelancer

SRS 09 - The system shall connect to database.

E-UC – 11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project

SRS 29 - The system shall display list of bid information below job information bidId, budget, bidding detail **,** link to Freelancer profile and button to request freelancer

SRS 30 - The system shall send message to supply freelancer that ***service request customer*** selected form bidder list.

SRS 09 - The system shall connect to database.

4.2 Use case Description & Activity Diagram

4.2.1 Use case Description and Activity Diagram

Use case description will be create follow the submitted user requirement in each progress. Some use cases will not have their use case description. That means the user requirements, which related to those use cases, were not submitted in any progress yet. Both use case and activity diagram will be grouped follow users of system (**service request customer**, **freelance supply**, **Guess** and **Administrator**) same as grouping of requirements.

Use case of service request customer and guess for progress 1

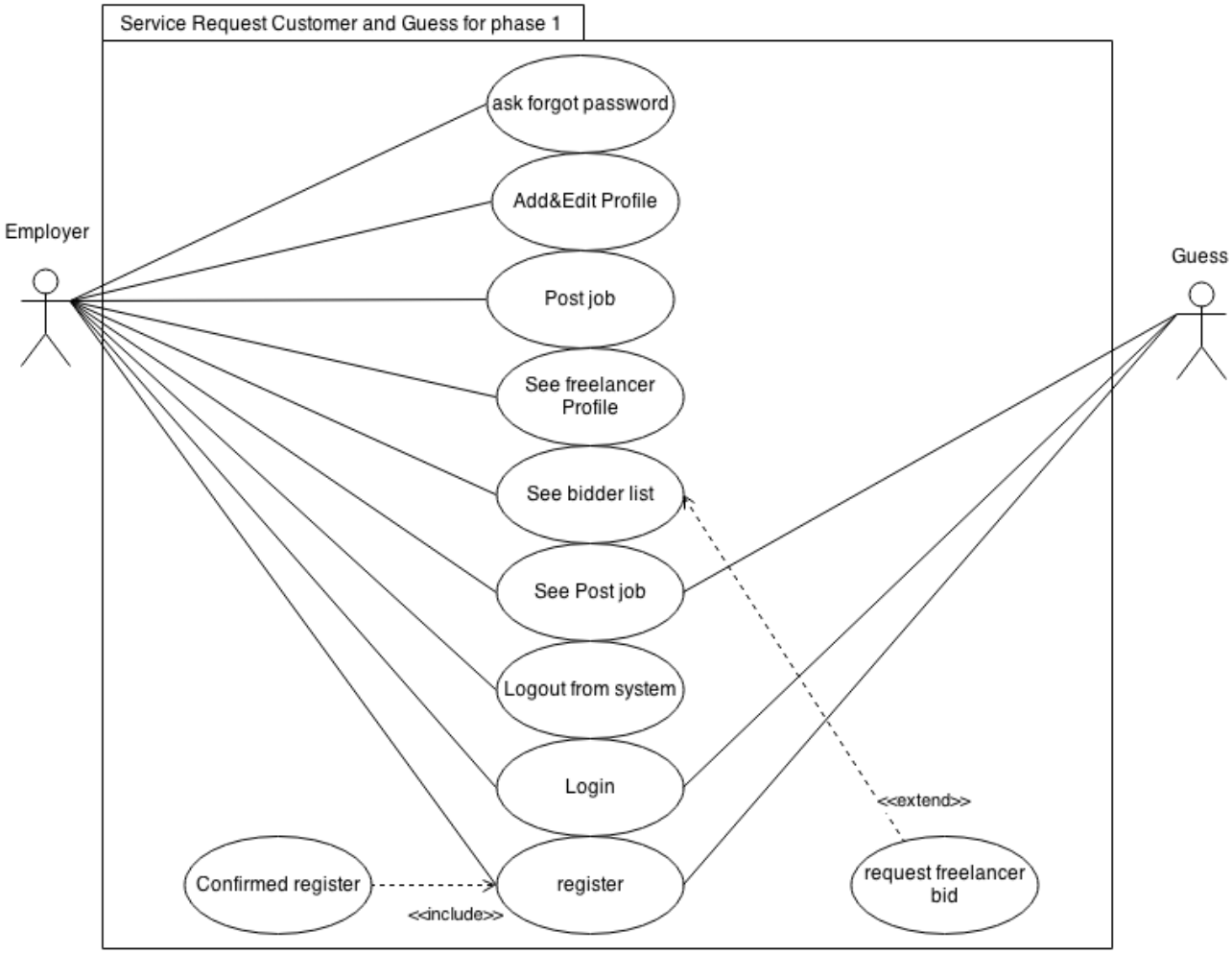


Figure 4.2.1.1 Use Case Description of service request customer for progress 1

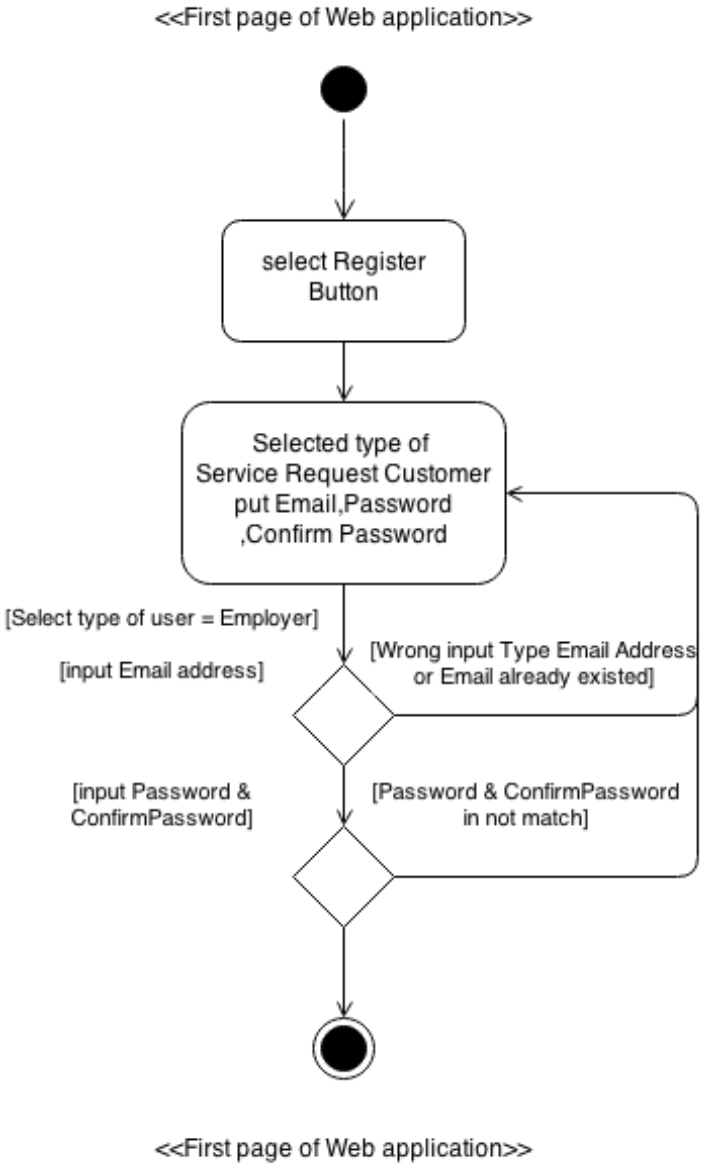
E-UC – 01: Register for service request customer

Use Case ID:	EUC-01	
Use Case Name:	Register for **service request customer**	
Short Description:	**service request customer** get account for using web-application	
Actor:	**service request customer**	
Pre-condition:	**service request customer** does not have account	
Post-condition	**service request customer** get link form E-mail that they using for register	
Flow of Event:	**service request customer**	**system**
	1. **service request customer** selected register button in first page of Web-application	
		2.system provide UI to select type of user input Email, Password and ConfirmPassword
	3. **Service request customer** Selected type of user as service request customer, input their email address, Password and Confirm Password	
		4.System will send link to confirm register to email that user input on previously
	5. **Service request customer** click link on Email	
Alternative Flow:	3a. Service request customer input invalid type of email or email already existed in system - 3a.1 system display error message - 3a.2 **Service request customer** input email address again. - 3b. Service request customer input Username that already exited ,wrong confirmed code or password & confirmed password does not match - 3b.1 system display error message - 3b.2 **Service request customer** input all of Username confirmed code, password & confirmed-password again.	
Exceptional:	3. Service request customer can click back to list to go to first-page of web application	
Priority:	High	

Input

Name	Description	Example	Remarks
Memberlist	DropDownlist for input type of user receive type string	“Employer”	1.input can be string only “Employer” cause User need to register in type of Employer
Email	Only alphabet and number are allowed. Character can be used. Need to input in type Email	Pureman9@gmail.com	1.Email need to be this type [UsernameEmail@Host of Email.com]
Password	Only alphabet and number are allowed.	Poiu12345	
ConfirmPassword	Only alphabet and number are allowed.and need to input same Password	Poiu12345	

E-AC – 01: Register for **service request customer**



- Information Include type of User that system provided as *service request customer* and *freelance supply*, Email Address
- In Registration page they will send confirmation code to email that *service request customer* input on previously.

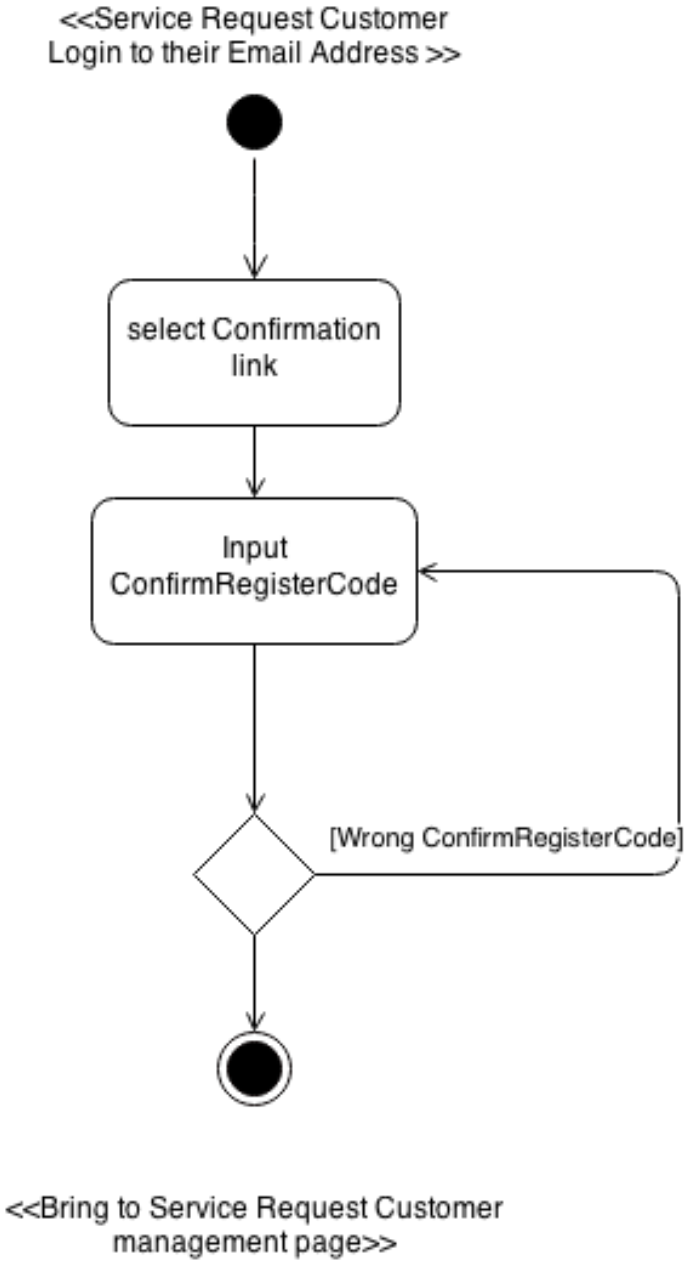
E-UC – 02: Confirm register for **service request customer**

Use Case ID:	E-UC-02	
Use Case Name:	Confirm register for **service request customer**	
Short Description:	**service request customer** confirm register in their email address	
Actor:	**service request customer**	
Pre-condition:	**service request customer** Register as **service request customer** on web-application	
Post-condition	**Service request customer** get account to using web-application.	
Flow of Event:	**service request customer**	**system**
	1. **service request customer** login to their email address	
		2.System provide confirmation Email to **service request customer**
	3. **service request customer** click open confirmation Email	
		4.system provide ConfirmationCode and link in confirmation Email
	5. **service request customer** click link	
		6.system display confirmation page and provide UI to input Confirmation code
	7. **service request customer** input confirmation code then click submit	
		8. System bring **Service request customer** to main page of **Service request customer** management
Alternative Flow:	7a. Service request customer input wrong confirmation - 7a.1 system display error message - 7a.2 **Service request customer** input confirmation code again.	
Exceptional:	7. Service request customer can click back to list to go to first-page of web application	
Priority:	High	

Input

Name	Description	Example	Remarks
ComfirmRegisterCode	number are allowed. Character can't be used.	78789098	1.Employer will get ConfirmRegister in Email Address.

E-AC – 02: Confirm register for **service request customer**



- ConfirmationRegisterCode would be automatically sent form system to email that Service Request Customer input in register page

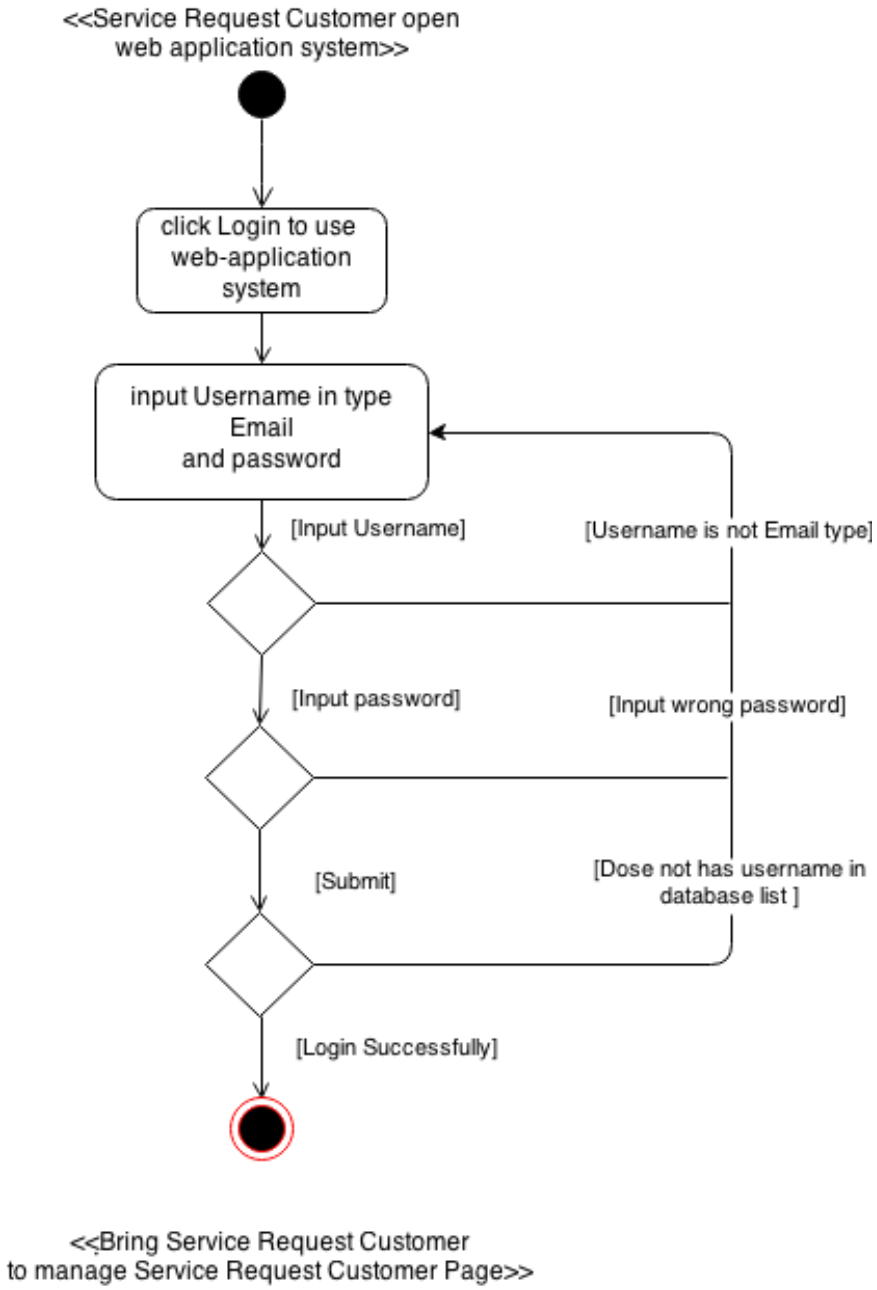
E-UC – 03: Login for service request customer

Use Case ID:	EUC-03	
Use Case Name:	Login for **service request customer**	
Short Description:	**service request customer** Login to using web-application system	
Actor:	**service request customer**	
Pre-condition:	**service request customer** Confirm register as **service request customer** on web-application	
Post-condition	**Service request customer** Login to use Web-application system successfully.	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** select Login Buttton	
		2. System provide UI to input as Username in type E-mail and password.
	3. **Service request customer** input Username in type E-mail and password.	
		4.System find Username in database list
		5.System bring **Service request customer** to main page of **Service request customer** management
Alternative Flow:	3a **Service request customer** input wrong type Username(not Email type) to Login or wrong password that not match with username - 3a.1 system display error message - 3a.2 **Service request customer** input all of Username and password to login again	
Exceptional:	3. Service request customer can click back to go to first-page of web application 4a. **Service request customer** account does not exist in the database - 4a.1 System validation finds that the user record does not exist in the database. - 4a.2 Systems alerts the user that their record does not exist. - 4a.3 Use case ends	
Priority:	High	

Input

Name	Description	Example	Remarks
Username	Character and number are allowed.and need to input in type Email	“xxxx@cxxx.com”	1.Email need to be this type [UsernameofEmail@Hostof Email.com]
Password	Character and number are allowed.	Poiu12345	Password need to be match with password that input at previous

E-AC – 03: Login for **service request customer**



E-UC – 04: Add &Edit Profile for **service request customer**

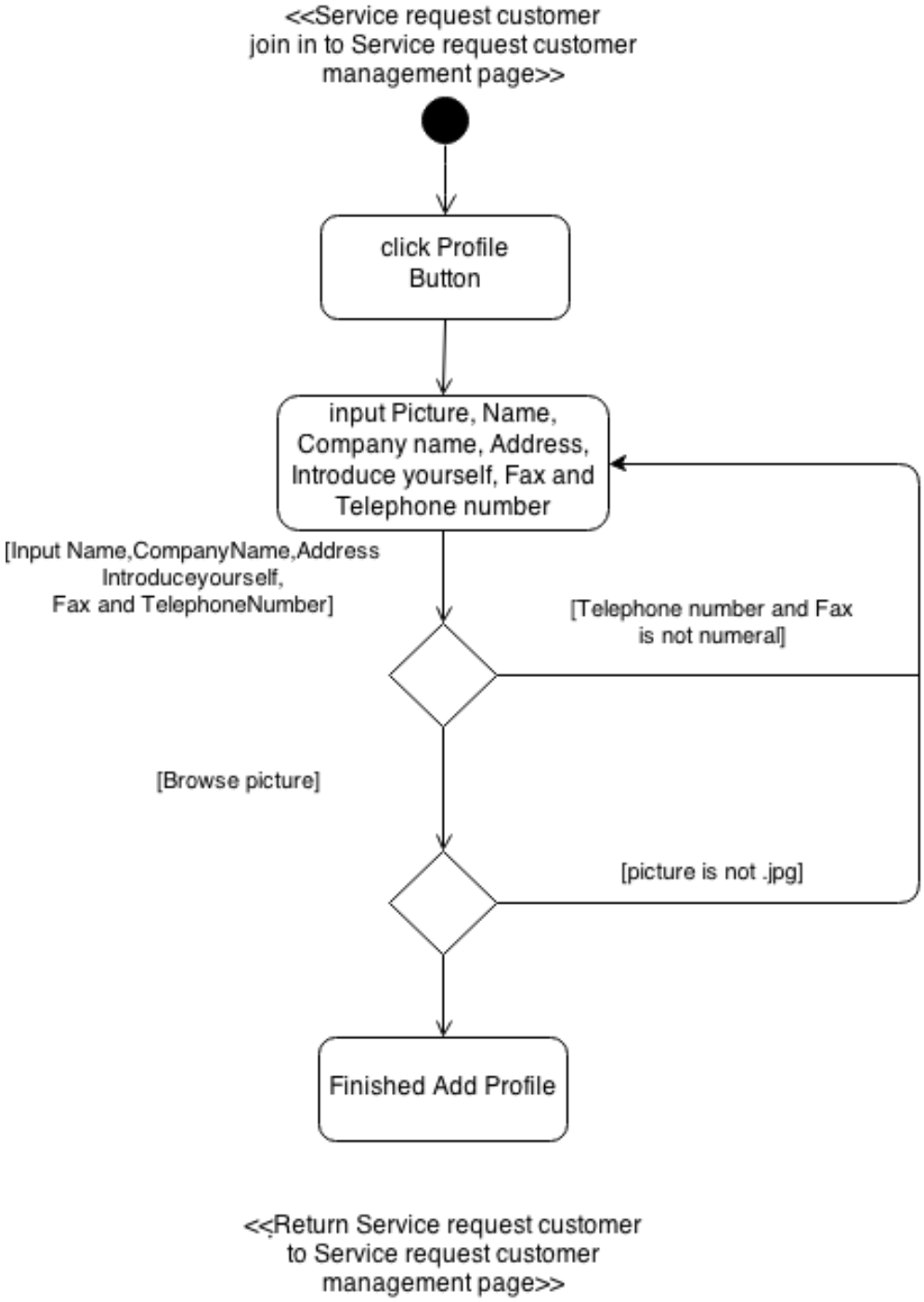
Use Case ID:	EUC-04	
Use Case Name:	Add Profile for **service request customer**	
Short Description:	**service request customer** Add profile to introduce about themselves to show in web application	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to use Web-application system successfully.	
Post-condition	**Service request customer** show information about themselves to other user in web application	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** come to **Service request customer** main page	
	2. **Service request customer** click Profile manage	
		3. System provide UI to input Picture, Name, Company name, Address, Introduce yourself, Fax and Telephone number.
	4. **Service request customer** input Picture, Name, Company name, Address, Introduce yourself, Fax and Telephone number in to UI of system	
		5.System retrieve Picture, Name, Company name, Address, Introduce yourself, Fax and Telephone number information save in to database
		6.System bring **Service request customer** to main page of **Service request customer** management
Alternative Flow:		
Exceptional:	4. Service request customer can click back to list to go to **Service request customer** mainpage of web application	
Priority:	Normal	

Input

Picture, Name, Company name, Address, Introduce yourself, and Telephone number.in textbox

Name	Description	Example	Remarks
Name	Character and number are allowed.and need to input in type Email	“Manuchet”	
Company name	Character and number are allowed.	Xcc cop	
Address	Character and number are allowed.	165/66 m4 maehear muang chiang mai 56000	
Introduce yourself	Character and number are allowed.	I have orange	
Telephone number	Only number are allowed	0862112787	
Fax	Only number are allowed	054333323	
Picture	Should be file .png or jpg	.jpg	Size of picture must display width="75" height="75" in top right of web application page.

E-AC – 04: Add & Edit Profile for **service request customer**

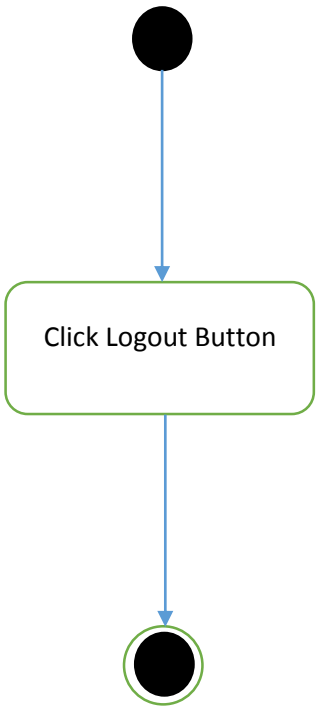


E-UC – 05: **service request customer** Logout from system

Use Case ID:	E-UC – 05	
Use Case Name:	**service request customer** Logout from system	
Short Description:	**service request customer** Add profile to introduce about themselves to show in web application	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to use Web-application system successfully.	
Post-condition	**Service request customer** Logout from system	
Flow of Event:	**service request customer**	**System**
		1. System provide button to logout from system
	2.click Logout Button	
		3.System bring first page of web application system
Alternative Flow:	-	
Exceptional:	-	
Priority:	Normal	

E-AC – 05:**service request customer** Logout from system

<<Service Request Customer Login to
use Web-application>>



<<Return Service Request Customer

To web-application mainpage >>

E-UC – 06: **Service request customer** can be ask their password form system if they forgot

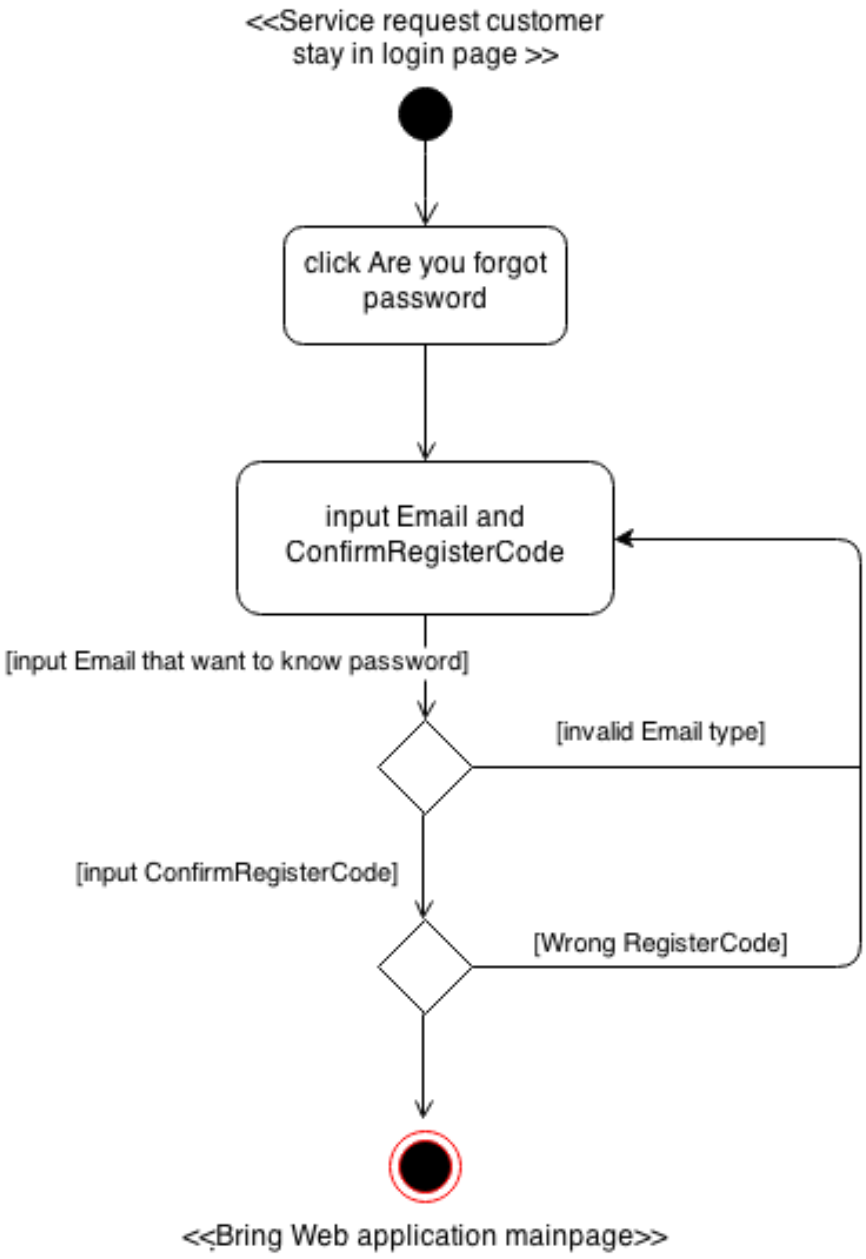
Use Case ID:	E-UC06	
Use Case Name:	Login for **service request customer**	
Short Description:	**service request customer** request password that they forgot from system	
Actor:	**service request customer**	
Pre-condition:	-	
Post-condition	**service request customer** get password form system via Email.	
Flow of Event:	**service request customer**	**system**
	1. **service request customer** join to web-application	
	2. **service request customer** click login button.	
		3. System provide UI to input as Username in type E-mail and password. Are you forgot password link
	4. **service request customer** click Are you forgot password link	
		5. System provide UI to input Email and ConfirmRegisterCode
	6. **service request customer** input Email and ConfirmRegisterCode	
		7.System find Email in database list
		8.System send Password to Email that they input previously
Alternative Flow:	6. **service request customer** can click back to list to go to first-page of web application 6a **service request customer** input wrong type Username(not Email type) to Login or wrong Confirmpassword that not match with username - 3a.1 system display error message - 3a.2 **service request customer** input all of Username and ConfirmRegisterCode to request password again.	
Exceptional:	7a. **service request customer** account does not exist in the database - 7a.1 System validation finds that the user record does not exist in the database. - 7a.2 Systems alerts the user that their record does not exist. - 7a.3 Use case ends - **6 . service request customer** can't remember their ConfirmRegisterCode	
Priority:	Normal	

Input

Email, ComfirmRegisterCode

Name	Description	Example	Remarks
Email	Character and number are allowed.and need to input in Email type	“Pureman9@gmail.com”	1.Email need to be this type [UsernameEmail@Host of Email.com]
ComfirmRegisterCode	number are allowed. Character can’t be used.	78789098	1.Employer will get ConfirmRegisterCode in Email Address.

E-AC – 06: **Service request customer** can be ask their password form system if they forgot



- Password would be automatically sent form system to email that Service Request Customer input in register page

E-UC – 07: Post Project for **service request customer**

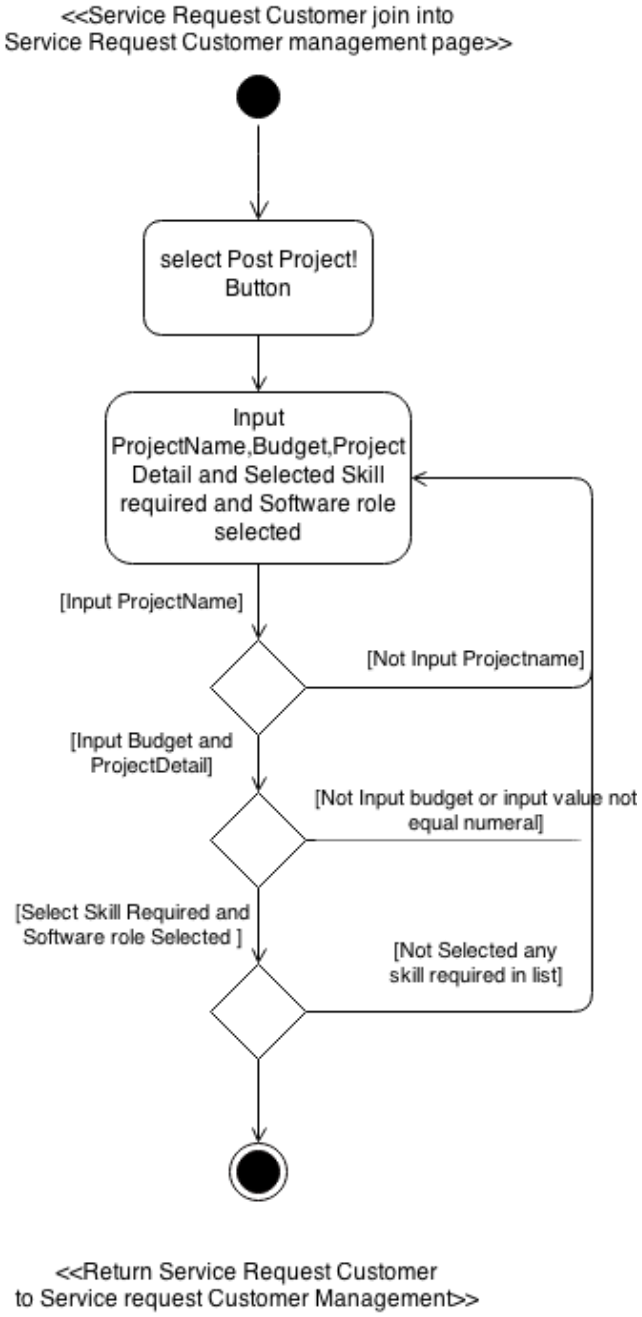
<table>
<tr><td>Use Case ID:</td><td colspan="2">E-UC – 06</td></tr>
<tr><td>Use Case Name:</td><td colspan="2">Post Project for service request customer</td></tr>
<tr><td>Short Description:</td><td colspan="2">service request customer Post and show Project to show other user in web-application system</td></tr>
<tr><td>Actor:</td><td colspan="2">service request customer</td></tr>
<tr><td>Pre-condition:</td><td colspan="2">Service request customer Login to use Web-application system successfully.</td></tr>
<tr><td>Post-condition</td><td colspan="2">-</td></tr>
<tr><td rowspan="6">Flow of Event:</td><td>service request customer</td><td>System</td></tr>
<tr><td>1. Service request customer come to Service request customer main page</td><td></td></tr>
<tr><td>2. Service request customer click post project button</td><td></td></tr>
<tr><td></td><td>3. System provide UI to input Project Name, Project Description, InitialBudget ,finalBudget, skill required and Software Job Category</td></tr>
<tr><td>4. Service request customer input Project Name, Project Description, InitialBudget ,finalBudget, skill required and Software Job Category in to UI of system</td><td></td></tr>
<tr><td></td><td>5.System retrieve Project Name, Project Description, InitialBudget ,finalBudget, skill required and Software Job Category and save in to database</td></tr>
<tr><td></td><td></td><td>6.System bring Service request customer to main page of Service request customer management</td></tr>
<tr><td>Alternative Flow:</td><td colspan="2">4a. Service request customer does not input Budget or not select any skill in list
- 4a.1 system display error message
- 4a.2 Service request customer input all of project Budget and Select Skill required in list again
4b Service request customer input InitialBudget ,finalBudget not equal numeric type or InitialBudget must less than finalBudget.
- 4b.1 system display error message
- 4b.2 Service request customer input all of project Budget and Select Skill required in list again</td></tr>
<tr><td>Exceptional:</td><td colspan="2">4. Service request customer can click back to list to go to Service request customer mainpage of web application</td></tr>
<tr><td>Priority:</td><td colspan="2">High</td></tr>
</table>

Input

Project Name, InitialBudget , finalBudget , Project Detail, skill required and Software role category

Name	Description	Example	Remarks
Project Name	Character and number are allowed.and need to input in type Email	“Manuchet”	
InitialBudget	Only number and .are allowed.	10.00	Value need to be two decimal places
finalBudget	Only number and .are allowed.	12.00	Value need to be two decimal places and need input value more than InitialBudget
Project Detail	Character and number are allowed.	“This project from XVP ccc 90 Coperation”	
skill required	Skill need to be Skill that system generate	ASP.NET	Skill is type of checkbox including Java , Javascript , C ,Cshrap , Cplus , PHP ,Objective_C ,Python ,ASP_NET ,Ruby ,SQL, Html , CSS ,Android , XML
Software role category	Software role category need to be category that system generated	Web Developer	Software role category is type of

E-AC – 07: Post Project for **service request customer**

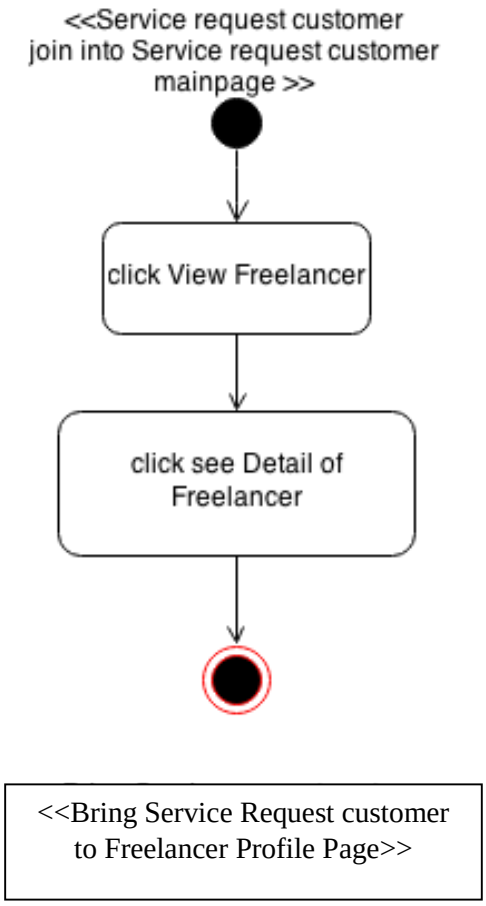


- In Select skill require at least 1 box that system provide and In Software Role If Service request customer not select system will automatically input type of Software Role Equal "Web Developer"

E-UC – 08: **Service request customer** can view Freelancer profile

Use Case ID:	E-UC – 08	
Use Case Name:	**Service request customer** can view Freelancer profile	
Short Description:	**service request customer** can view profile information of freelancer	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to using web application successfully	
Post-condition	-	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** come to **Service request customer** main page	
	2. **Service request customer** click View freelancer	
		3. System provide list of freelancer that available in database.
	4. **Service request customer** click See more of freelancer in list.	
		5.System will display Picture Name, Skill, Software Job Category, Address, Introduce yourself, Fax and Telephone number in Profile detail of **Supply Freelancer**
Alternative Flow:		
Exceptional:	4. Service request customer can click back to list to go to **Service request customer** mainpage of web application	
Priority:	Normal	

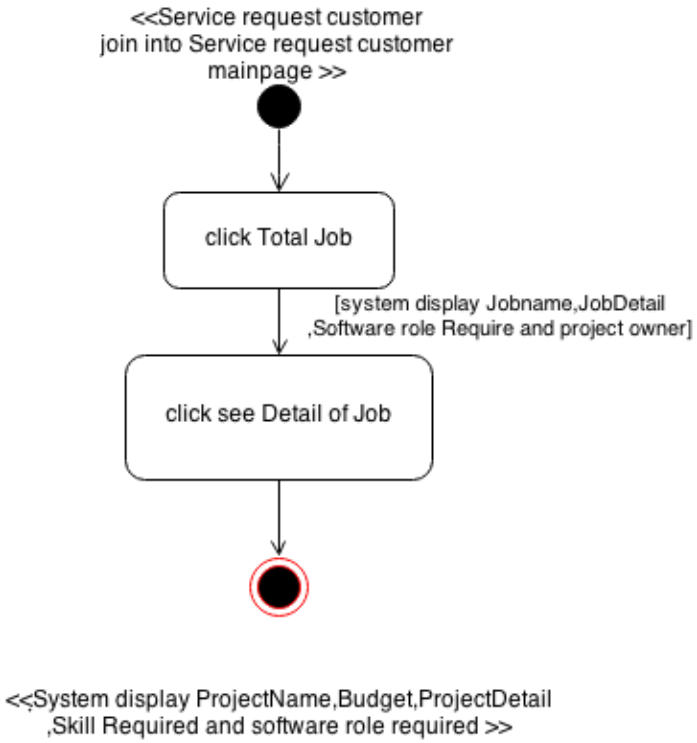
E-AC – 08: **Service request customer** can view Freelancer profile



E-UC – 09: **Service request customer** can view Job list that posted to system

Use Case ID:	E-UC – 09	
Use Case Name:	**Service request customer** can view Job list that posted to system	
Short Description:	**service request customer** can view Job list within system	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to using web application successfully	
Post-condition	-	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** come to **Service request customer** main page	
	2. **Service request customer** click job title	
		3. System provide Datetopost ,Titlenamelist of job that available in database include InitialBudget, finalBudget and Software role Category
	4. **Service request customer** click “See more” of Job that **Service request customer** want to see	
		5.System will display Post Date,Software Job Category, Title,Description, InitialBudget, finalBudget, Skill required and Other skill
Alternative Flow:		
Exceptional:	4. Service request customer can click back to list to go to **Service request customer** mainpage of web application	
Priority:	Normal	

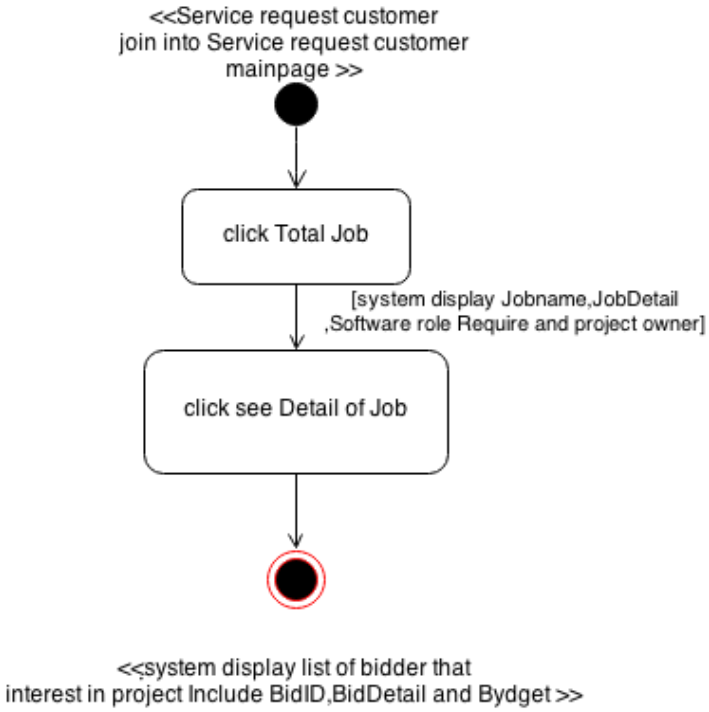
E-AC – 09: **Service request customer** can view other Job list within system



E-UC – 10: The **service request customer** can view list of bidder

Use Case ID:	E-UC – 10	
Use Case Name:	**Service request customer** can view list of bidder	
Short Description:	**service request customer** can view list of bidder in each project include budget & bidding detail	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to using web application successfully	
Post-condition	-	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** come to **Service request customer** main page	
	2. **Service request customer** click job title	
		3. System provide Datetopost ,Titlenamelist of job that available in database include InitialBudget, finalBudget and Software role Category
	4. **Service request customer** click detail of Job that they want to see	
		5.System will display FreelancePicture,BidId freelancerName,BidderDetail and Budget in bidder list below job information
Alternative Flow:		
Exceptional:	4. Service request customer can click back to list to go to **Service request customer** mainpage of web application	
Priority:	Normal	

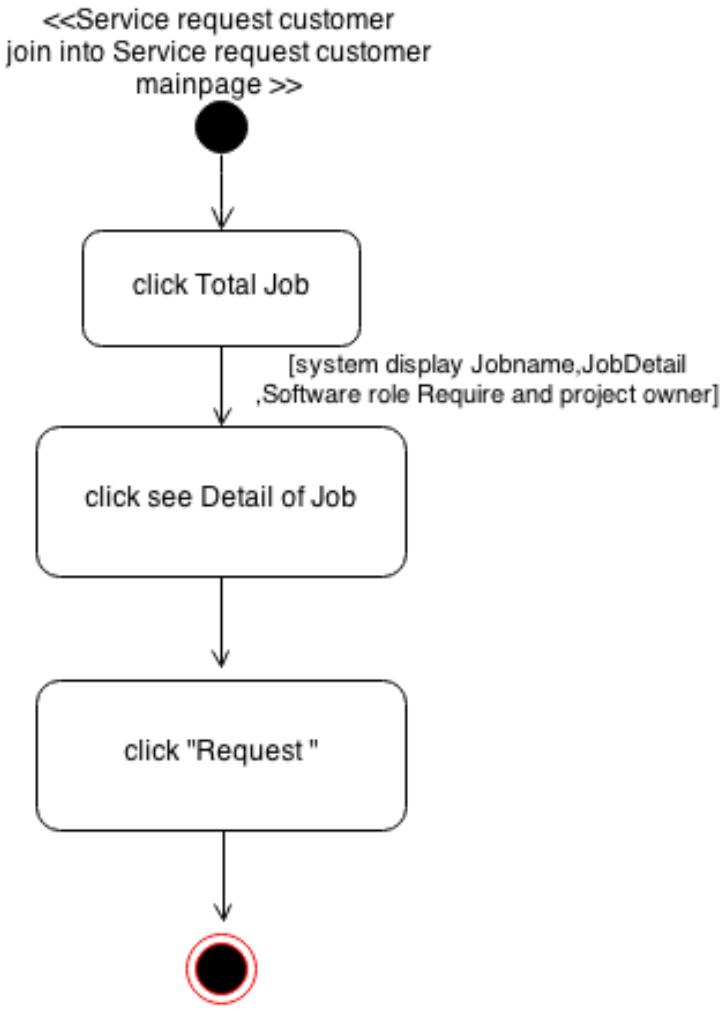
E-AC-10: The **service request customer** can view list of bidder



E-UC – 11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project

Use Case ID:	E-UC – 11	
Use Case Name:	**Service request customer** can request freelancer that come to bidding their (***service request customer***) project	
Short Description:	**service request customer** can request Freelancer in bidder list at their own project	
Actor:	**service request customer**	
Pre-condition:	**Service request customer** Login to using web application successfully	
Post-condition	-	
Flow of Event:	**service request customer**	**system**
	1. **Service request customer** come to **Service request customer** main page	
	2. **Service request customer** click job title	
		3. System provide Datetopost ,Titlenamelist of job that available in database include InitialBudget, finalBudget and Software role Category
	4. **Service request customer** click detail of Job that they want to see	
		5.System will display FreelancePicture,BidId freelancerName,BidderDetail and Budget in bidder list below job information
	6. **Service request customer** click request	
Alternative Flow:		
Exceptional:	4. Service request customer can click back to list to go to **Service request customer** mainpage of web application	
Priority:	Normal	

E-AC-11: The ***service request customer*** can request freelancer that come to bidding their (***service request customer***) project



Use case of freelance supply for progress 1

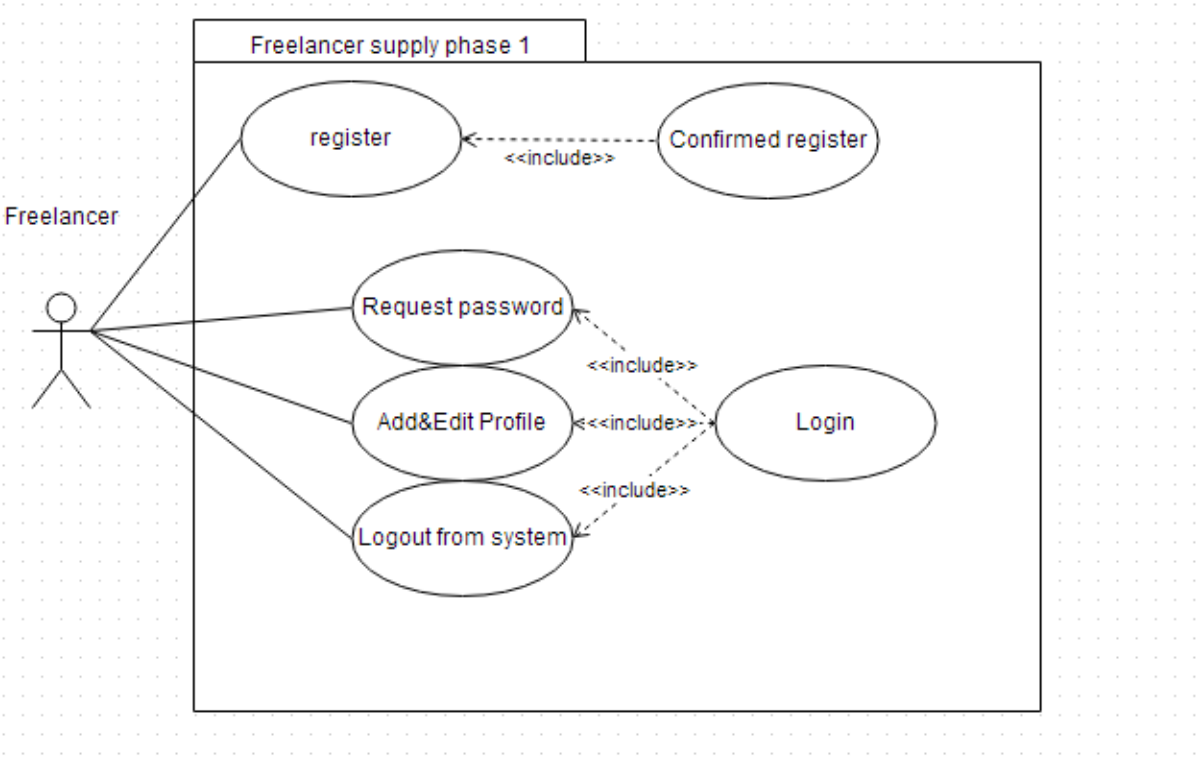


Figure 4.2.1.2 Use Case Description of freelance supply for progress 1

F-UC – 01: Register for **freelance supply**

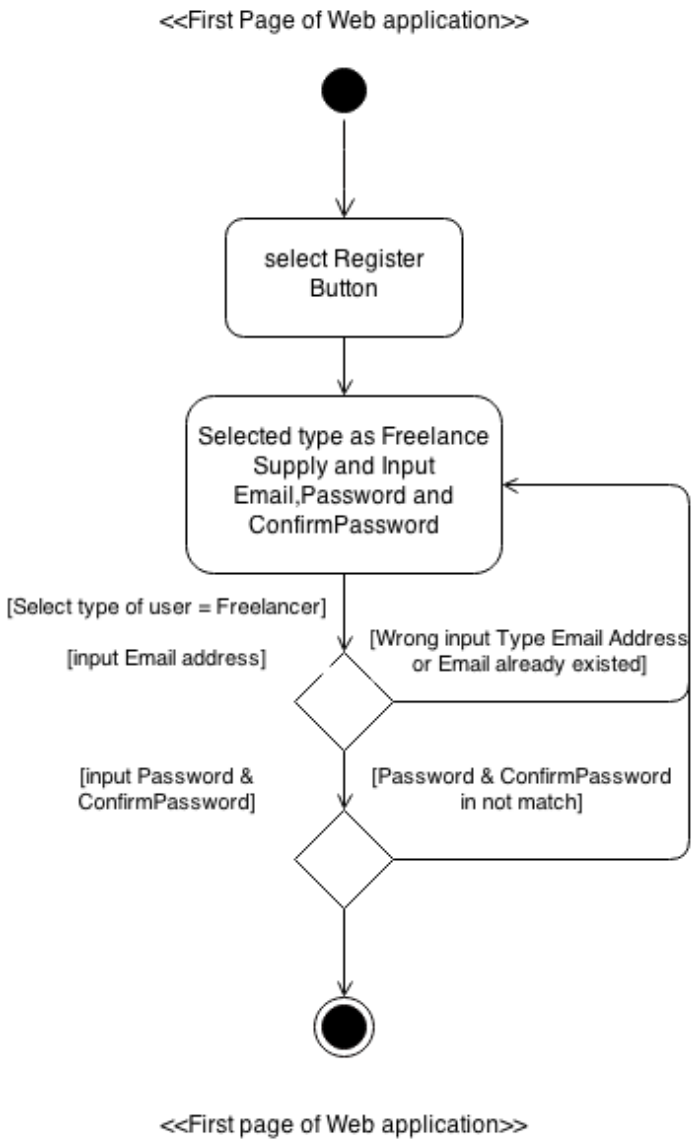
<table>
<tr><td>Use Case ID:</td><td colspan="2">F-UC-01</td></tr>
<tr><td>Use Case Name:</td><td colspan="2">Register for freelance supply</td></tr>
<tr><td>Short Description:</td><td colspan="2">freelance supply get account for using web-application</td></tr>
<tr><td>Actor:</td><td colspan="2">freelance supply</td></tr>
<tr><td>Pre-condition:</td><td colspan="2">freelance supply does not have account</td></tr>
<tr><td>Post-condition</td><td colspan="2">freelance supply get link form E-mail that they using for register</td></tr>
<tr><td rowspan="6">Flow of Event:</td><td>freelance supply</td><td>system</td></tr>
<tr><td>1. freelance supply selected register button in first page of Web-application</td><td></td></tr>
<tr><td></td><td>2.system provide UI to input Email, select type of user password and ConfirmPassword</td></tr>
<tr><td>3. freelance supply Selected type of user as freelancer, input their email address password and ConfirmPassword.</td><td></td></tr>
<tr><td></td><td>4.System will send link to confirm register to email that user input on previously</td></tr>
<tr><td>5. Service request customer click link on Email</td><td></td></tr>
<tr><td>Alternative Flow:</td><td colspan="2">3. freelance supply can click back to list to go to first-page of web application
3a. freelance supply input invalid type of email or email already existed in system
- 3a.1 system display error message
- 3a.2 freelance supply input email address again.

3b. freelance supply input wrong confirmed code or password & confirmed password does not match
- 3b.1 system display error message
- 3b.2 freelance supply input all of Email, password & confirmed-password again.</td></tr>
<tr><td>Exceptional:</td><td colspan="2">-</td></tr>
<tr><td>Priority:</td><td colspan="2">High</td></tr>
</table>

Input

Name	Description	Example	Remarks
Memberlist	DropDownlist for input type of user receive type string	“Employer”,”Freelancer”	1.input can be string only “Freelancer” cause User need to register in type of Freelancer
Email	Only alphabet and number are allowed. Character can be used. Need to input in type Email	Pureman8@hotmail.com	1.Email need to be this type [UsernameofEmail.Hostof Email.com]
Password	Only alphabet and number are allowed.	Poiu123459	
ConfirmPassword	Only alphabet and number are allowed.and need to input same Password	Poiu123459	

F-AC – 01: Register for **freelance supply**



- Information Include type of User that system provided as *service request customer* and *freelance supply*, Email Address
- In Registration page they will send confirmation code to email that *Freelancer supply* input on previously.

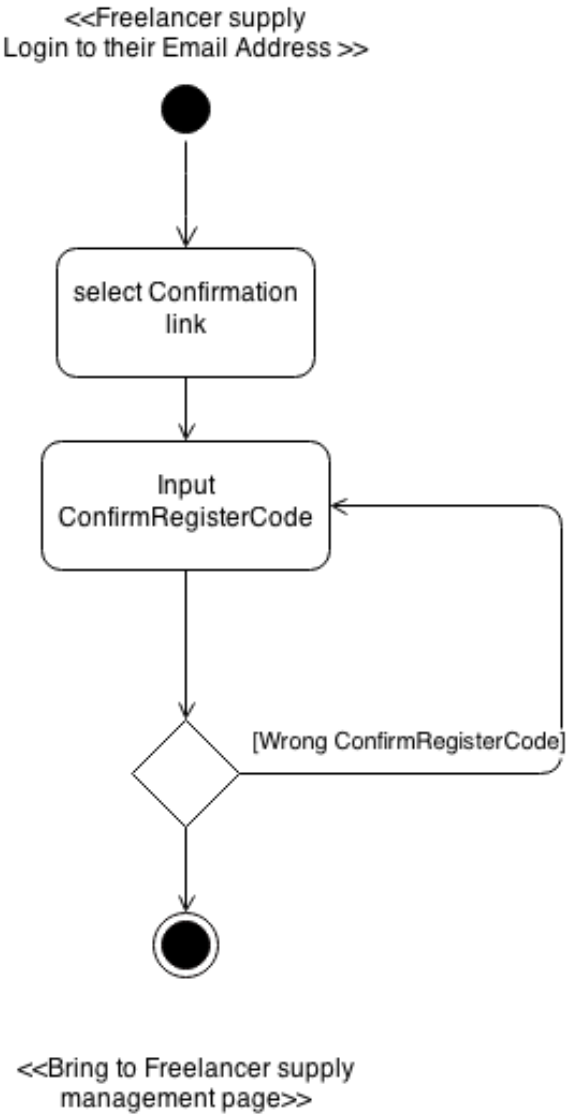
F-UC – 02: Confirm register for **freelance supply**

Use Case ID:	F-UC-02	
Use Case Name:	Confirm register for **freelance supply**	
Short Description:	**freelance supply** confirm register in their email address	
Actor:	**freelance supply**	
Pre-condition:	**freelance supply** Register as **freelance supply** on web-application	
Post-condition	**freelance supply** get account to using web-application.	
Flow of Event:	**freelance supply**	**system**
	1. **service request customer** login to their email address	
		2.System provide confirmation Email to **service request customer**
	3. **service request customer** click open confirmation Email	
		4.system provide ConfirmationCode and link in confirmation Email
	5. **service request customer** click link	
		6.system display confirmation page and provide UI to input Confirmation code
	7. **service request customer** input confirmation code then click submit	
Alternative Flow:	4a. **freelance supply** input wrong confirmed code does not match - 4a.1 system display error message - 4a.2 **freelance supply** confirmed code again.	
Exceptional:	3. **freelance supply** can click back to list to go to first-page of web application	
Priority:	High	

Input

Name	Description	Example	Remarks
ComfirmRegisterCode	number are allowed. Character can't be used.	78789098	1.Freelancer will get ConfirmRegister in Email Address.

F-AC – 02: Confirm register for **freelance supply**



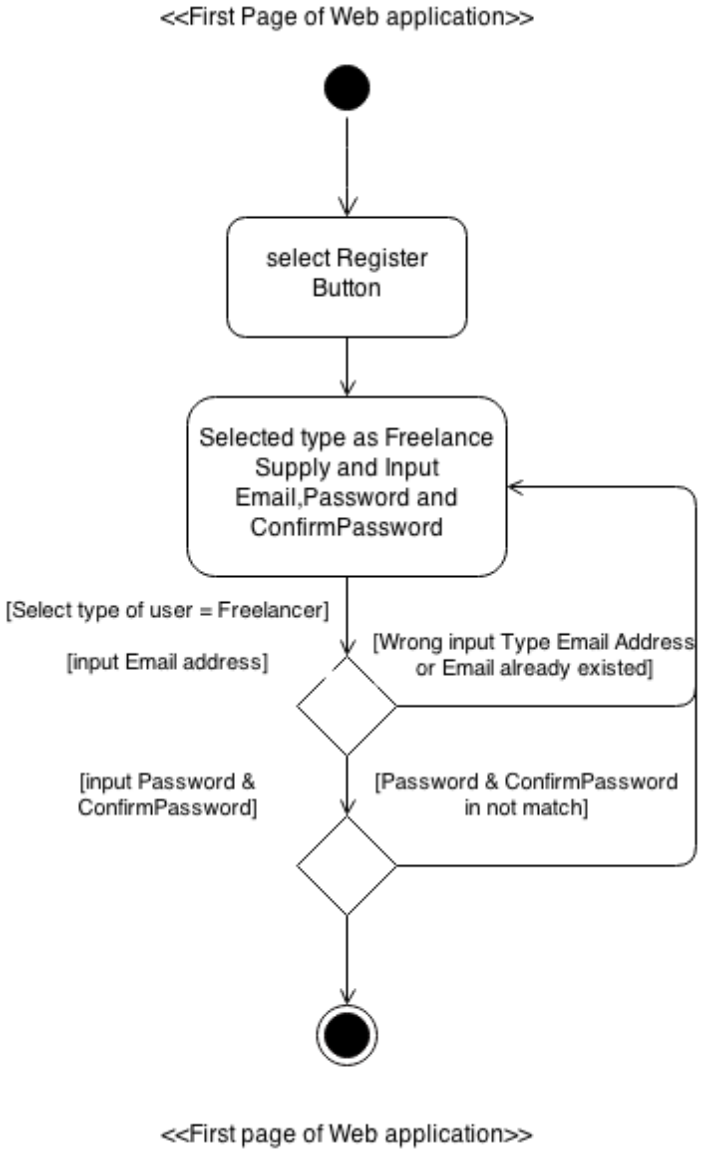
F-UC – 03: Login for **freelance supply**

Use Case ID:	F-UC-03	
Use Case Name:	Login for **freelance supply**	
Short Description:	**freelance supply** Login to using web-application system	
Actor:	**freelance supply**	
Pre-condition:	**freelance supply** Confirm register as **freelance supply** on web-application	
Post-condition	**freelance supply** Login to use Web-application system successfully.	
Flow of Event:	**freelance supply**	**system**
	1. **freelance supply** join to web-application	
		2. System provide UI to input as Username in type E-mail and password.
	3. **freelance supply** input Username in type E-mail and password.	
		4.System find Username in database list
		5.System bring **freelance supply** to main page of **freelance supply** management
Alternative Flow:	3. Service request customer can click back to list to go to first-page of web application 3a **freelance supply** input wrong type Username(not Email type) to Login or wrong password that not match with username - 3a.1 system display error message - 3a.2 **freelance supply** input all of Username and password to login again.	
Exceptional:	4a. **freelance supply** account does not exist in the database - 4a.1 System validation finds that the user record does not exist in the database. - 4a.2 Systems alerts the user that their record does not exist. - 4a.3 Use case ends	
Priority:	High	

Input

Name	Description	Example	Remarks
Username	Character and number are allowed.and need to input in type Email	“xxxx@cxxx.com”	1.Email need to be this type [UsernameofEmail.Hostof Email.com]
Password	Character and number are allowed.	Poiu12345	Password need to be match with password that input at previous

E-AC – 03: Login for **freelance supply**



F-UC – 04: Add &Edit Profile for **freelance supply**

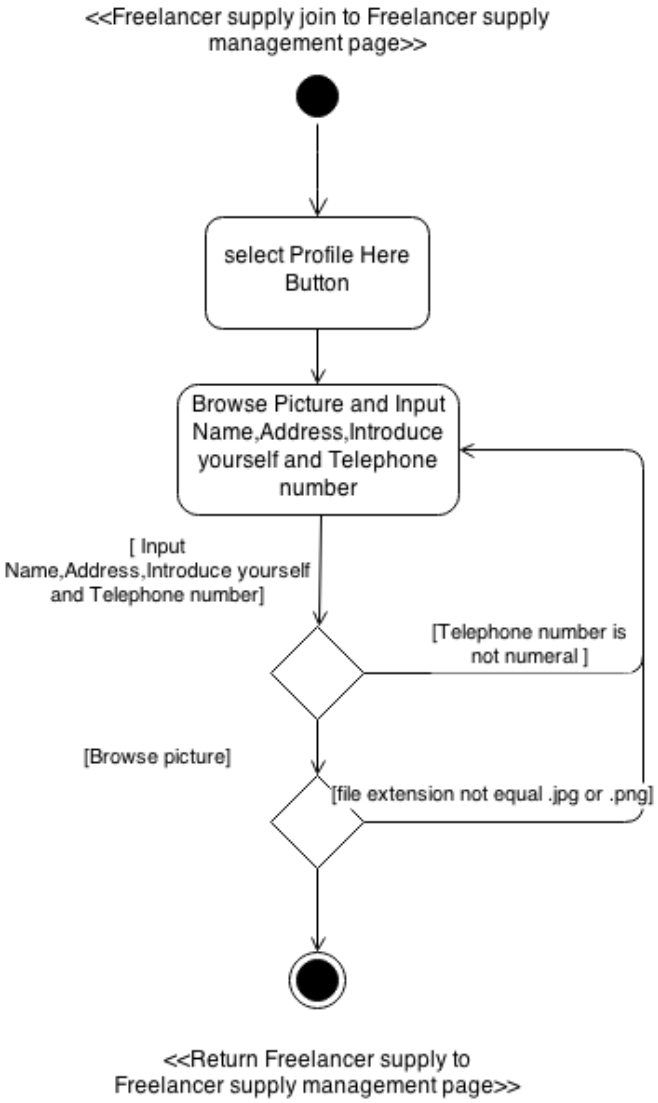
Use Case ID:	F-UC-04	
Use Case Name:	Add Profile for **freelance supply**	
Short Description:	**freelance supply** Add profile to introduce about themselves to show in web application	
Actor:	**freelance supply**	
Pre-condition:	**freelance supply** Login to use Web-application system successfully.	
Post-condition	**freelance supply** show information about themselves to other user in web application	
Flow of Event:	**freelance supply**	**system**
	1. **freelance supply** come to **freelance supply** main page	
	2. **freelance supply** click Profile manage	
		3. System provide UI to input Picture, Name, Company name, Address, Introduce yourself, and Telephone number.
	4. **freelance supply** input Picture, Name, Company name, Address, Introduce yourself, and Telephone number in to UI of system	
		5.System retrieve Picture, Name, Company name, Address, Introduce yourself, and Telephone number information save in to database
		6.System bring **freelance supply** to main page **freelance supply** management
Alternative Flow:	4. **freelance supply** can click back to list to go to **freelance supply** mainpage of web application	
Exceptional:	-	
Priority:	Normal	

Input

Name	Description	Example	Remarks
Name	Character and number are allowed.and need to input in type Email	“Manuchet”	
Address	Character and number are allowed.	165/66 m4 maehear muang chiang mai 56000	
Introduce yourself	Character and number are allowed.	I have orange	
Telephone number	Only number are allowed	086-211-2787	
Picture	Should be file .png or jpg	.jpg	Size of picture width="75" height="75"

Name, Company name, Address, Introduce yourself, and Telephone number. And Browse Picture to input to database

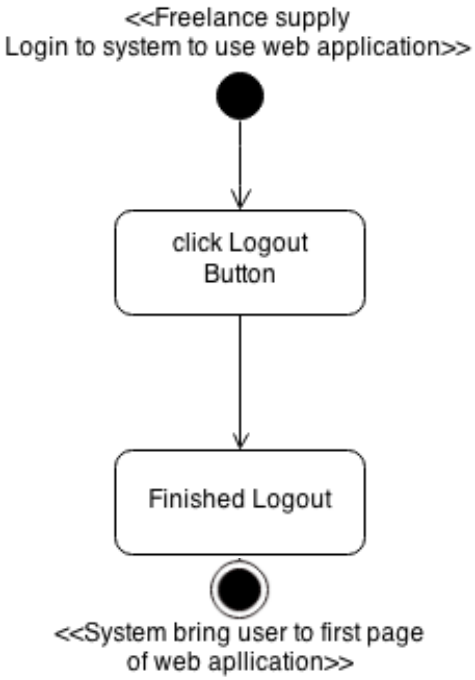
F-AC – 04: Add&Edit Profile for **freelance supply**



F-UC – 05: **freelance supply** Logout from system

Use Case ID:	F-UC – 05	
Use Case Name:	**freelance supply** Logout from system	
Short Description:	**freelance supply** Add profile to introduce about themselves to show in web application	
Actor:	**freelance supply**	
Pre-condition:	**freelance supply** Login to use Web-application system successfully.	
Post-condition	**freelance supply** Logout from system	
Flow of Event:	**freelance supply**	**system**
		1. System provide button to logout from system
	2.click Logout Button	
		3.System bring **freelance supply** first page of web application system
Alternative Flow:	-	
Exceptional:	-	
Priority:	Normal	

F-AC – 05: **freelance supply** Logout from system



F-UC – 06: *freelance supply* can be ask their password form system if they forgot

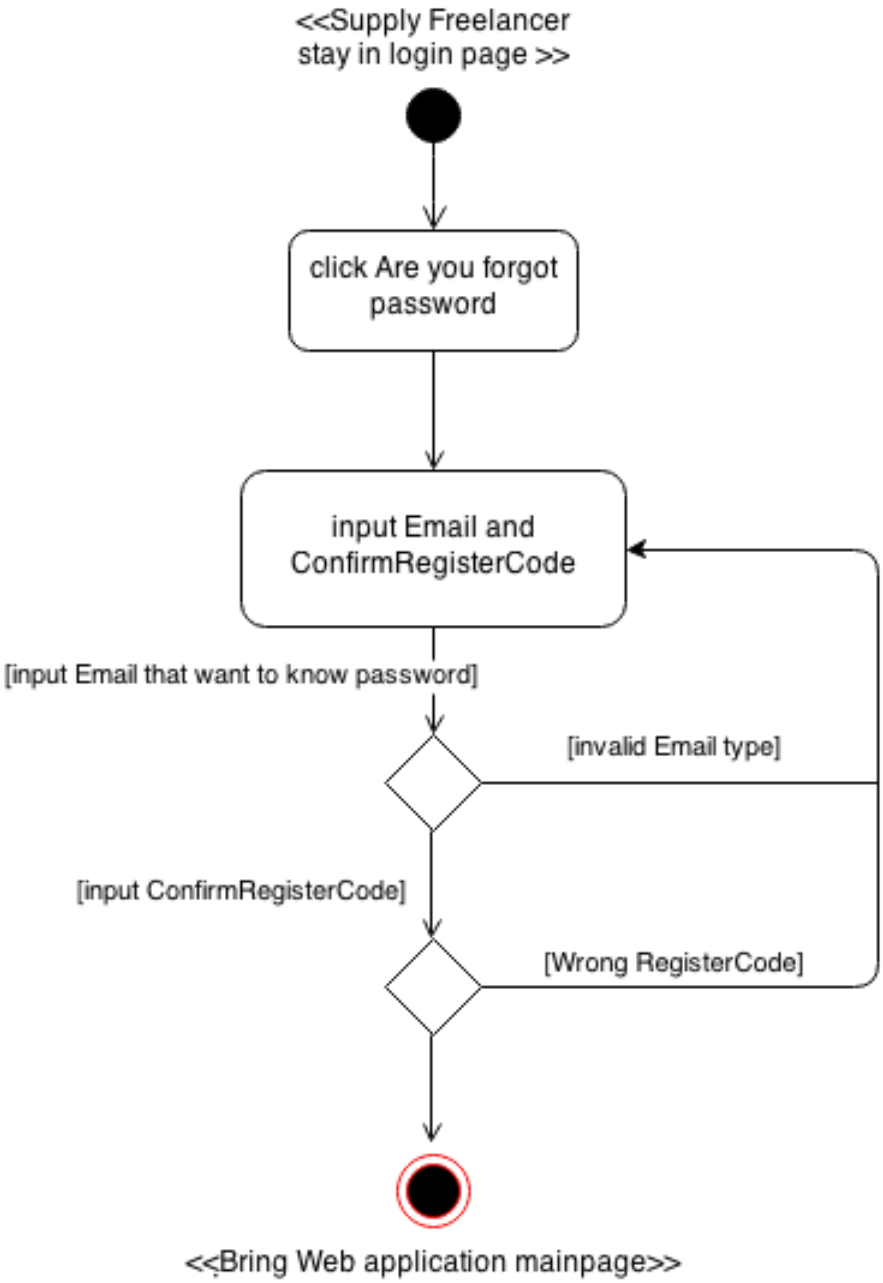
Use Case ID:	F-UC06	
Use Case Name:	Login for **freelance supply**	
Short Description:	**freelance supply** request password that they forgot from system	
Actor:	**freelance supply**	
Pre-condition:	-	
Post-condition	**freelance supply** get password form system via Email.	
Flow of Event:	**freelance supply**	**system**
	1. **freelance supply** join to web-application	
	2. **freelance supply** click login button.	
		3. System provide UI to input as Username in type E-mail and password. Are you forgot password link
	4. **freelance supply** click Are you forgot password link	
		5. System provide UI to input Email and ConfirmationCode
	6. **freelance supply** input Email and ConfirmationCode	
		7.System find Email in database list
		8.System send Password to Email that they input previously
Alternative Flow:	6. **freelance supply** can click back to list to go to first-page of web application 6a **freelance supply** input wrong type Username(not Email type) to Login or wrong ConfirmationCode that not match with username - 3a.1 system display error message - 3a.2 **freelance supply** input all of Username and ConfirmationCode to login again.	
Exceptional:	7a. **freelance supply** account does not exist in the database - 4a.1 System validation finds that the user record does not exist in the database. - 4a.2 Systems alerts the user that their record does not exist. - 4a.3 Use case ends **6 freelance supply** can't remember their ConfirmRegisterCode	
Priority:	Normal	

Input

Email, ComfirmRegisterCode

Name	Description	Example	Remarks
Email	Character and number are allowed.and need to input in Email type	“Pureman9@gmail.com”	1.Email need to be this type [UsernameEmail@Host of Email.com]
ComfirmRegisterCode	number are allowed. Character can’t be used.	78789098	1.Employer will get ConfirmRegisterCode in Email Address.

F-AC – 06: *freelance supply* can be ask their password form system if they forgot



4.3 Quality Requirement

Product operation factors

- **Correctness** - The software product should able to provide more than 90% correctness of data from user traditional request.

- **Reliability** - The software should able to handle more than 90% of traditional activity with less than 10% of software's failure.

Product revision factors

- **Testability** - The software should able to be tested 100% of it defined routine and functionality.

Product transition factors

- **Reusability** - More than 20% part of finished software product should able to be reused in future development.