Software Requirement Specifications

TicToc Courier

Version: [1.0]

Project Code	01
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Contents

1.Introduction:

Technology is emerging day by day and it focuses on solving the daily life problems of people. Today, almost everyone has smart phone and demand of mobile apps is at its peak. People wants to have the facility to get all things done by just one click on their smart phone.

TTCS is an idea to engage people to help other people with negligible amount of effort, within reasonable amount of time and earn reasonable amount of money. This app will help people to receive their items from a city to their destination city with quick service. There will be two kind of users of TTCS:

1) Sender/Receiver

2) Carrier

If a carrier wants to visit city B from city A, he/she will post his/her schedule of departure and arrival time along with information about arriving and departing bus/train station such as platform/terminal number etc. Suppose if N number of carriers are departing from city A to city B, the app will have schedule of all N carriers. A sender/receiver that wants his/her item to be delivered to his destination of city B from city A will have information about all N carriers and

will have liberty to choose anyone among them. Sender will meet carrier at departing bus/train station at least 20 minutes before departure of carrier and process of verification about number of items, type of items, approximate weight, verification and temporary registeration of NIC of carrier on sender/receiver front end interface whereas NIC information of sender will be stored in front end interface of carrier for security purpose. Once the NIC information is temporarily reistered along with verification about type of items and their weight, a unique code will be send to sender via sms that he needs to enter to the front end user of carrier if he/she agrees about the entered information about the sending items. After code is entered, payment will appear on front end screen of carrier that sender or reciever must pay in order to provide facility of payment from both sender and receiver end. After the payment is made in case if sender wants to pay or if sender agrees on the amount that receiver has to pay, the process will be initiated and sender will get a unique code that he needs to enter when he/she agrees that all the entered items are received in appropriate condition. If items are damaged, carrier will be fined and fine will be deducted from the deposited amount.

1.1 Purpose of Document

Purpose of this document is to present detailed Description of **TTCS**. This document contains information about Project objectives, interfaces, operations and Scope of **TTCS**.
This document describes the features of this app and also Constraints under which this app must be used. It also describes the stakeholders for whom this document is intended for.
This document contains information about all the Functional and non-functional requirements of **TTCS.**

1.2 Intended Audience

This document is intended to be used by project Supervisor, Faculty of Computer Science(CS-SE) and external examiner and also for project team of **TTCS** mobile Application.

1.3 Document Convention

1. The font used in this document is Times new Roman.
2. Font size is 12.
3. Font size for headings is 14 and they are bold.
4. Bold word in description is the name of App.
5. Underlined and bold Words are subheadings.
6. All the text is in black color.
7. ‘Shall’ is used to show that the specified functionality is necessary.
8. Every part of this document follows the labeling convention for listing of its Features.
   Labeling is as follows:
   - FE(feature) in project Scope
   - POB in Project objectives
   - HC in Hardware Constraints
   - SC in Software Constraints
   - CC in Cultural Constraints
   - HOE in Hardware Operating Environment
   - SOE in Software Operating Environment

- AD in Assumptions and Dependency
- HI in Hardware Interface
- SI in Software Interface
- CI in Communication Interface
- UR in Usability requirements
- PR in Performance Requirements
- SR in Security Requirement
- ROB in Robustness.

2.Overall System Description

2.1 Project Background

In our society, so many people travel to some destination to send his/her materials to utilize their resources to the requested destination and
bear the expense only for themselves even after having the services they have(TCS,leopards) other people who uses those services for utilizing their belongings at desired destination.
In existing Courier Services,people have to pay the more than reasonable amount of money even for the single sheet of paper(CNIC,bank_check etc).

They need to go to take out time from their busy schedule to the offices for their request that they want to proceed or most probably we need to take out the time for receiving purpose of the stuff we requested for visiting their offices.

On the contrary,people don't get their stuff by the time of they desire but by the will of courier services,whenever their van got full than it's departuring to a destination starts which require at least two days.

These sort of problems cause the serious situation which effects the wastage of time,money,covering greater distance for request.

"TTCS" is the solution to those problems. It is a mobile app through which users can easily Have their belongings with them without taking enough time.People can post over the app when they are likely to go in which city A to city B,intrested people will have to go and avail their service of taking materials they want to send.

2.2 Project Scope

TTCS is an android based application that provides the facility of getting stuff from place A to place B with respect to Time Travel date, Source and destination of the trip.
It also facilitate user to search for multiple choices to choose if person A is not comfortable with person B than he/she has N number of people who travel across the same cities in daily basis.
It will not only help people to sending their material but saving the money and most importantly the time and effort as well.

TTCS is very helpful for people who don't afford the enough charges of TCS services at current era and for those who have busy schedule and hard for them to take time for sending and

recieving stuff from different cities.It is very easy simple and efficient way of utilizing the resoucres of digitize world at your pocket.

FE-1 Application allows the user to authorize himself for using services of the application by giving his details which includes name, phone number, email, CNIC, Image.
FE-2 Application allows the user to multiple carrier at the same time.
FE-3 Application also allows the user to unique code which can be verify by sender/reciever and carrier.
FE-4 Application shows the details of request one made.
FE-5 Application also allows the user to share the timing of departuring from city A to city B.
FE-6 Application allows the user to contact and over app with whom request is made and who is intermediate potential person.
FE-7 Application shall allw to store the information(CNIC photo, contact no) till the request is not done.
FE-8 Application also allows the user to give frequency of stars or endorsedment based on the service of carrier.

2.3 Not in Scope

Appointment management or price management is not concerned with this project, people may contact with each other through chat, mail or number to set their meeting time or price for the service which will be decide by time temporal according to the users needs.

2.4 Project Objectives

POB-1 Save time of people by:
Allowing them not to bother themselves to go offices for sending or recieving stuff.
POB-2 Reasonable amount of money even for a single sheet of paper,cheque and etc.
POB-3 Relatively faster than other services, they can get their stuff within 7-8 hours(Ex:- karachi to sukkur)at their hand.

2.5 Stakeholders

Stakeholers	Description
General Public(carrier)	Any person who wants to carry the material he/she has to post over the app before the one day of departuring.Rest of the user can see and make reuest (if possible)
Sender/Reciever	Any one who likely have to have their materials would be reciever. Sender can be his/her relatively or it may be the carrier who is willingly to take their belongings with him/her.

2.6 Operating Environment

2.6.1 Hardware

HOE-1 The system will run on Android devices that are connected to internet.
HOE-2 Camera is also used for capturing image while registering as a member.
HOE-2 Camera is also used for capturing image of sender/reciever,carrier CNIC's.

2.6.2 Software

SOE-1 This application will run on Android OS.
SOE-2 MySQLLite database will be used in this app
SOE-3 App can be run on android version 4.3 lollypop or above.

2.7 System Constraints

2.7.1 Hardware Constraints

HC-1 System will run on smart phone.
HC-2 Smart phone must be connected to internet.
HC-3 Camera must be in working condition while capturing image for registering as a Member and for CNIC capturing as well.

2.7.2 Software Constraints

SC-1 System must run on android operating system.
SC-2 Android version must be 4.3 lollypop or above.

2.7.3 Cultural Constraints

CC-1 English language will be used in this software.

2.7.4 Legal Constraints

LC-1 In case of breaking the damage and not delievering belongings at the desired Destination.Seriously action will be taken by owning authorities.

2.7.5 Environmental Constraints

Not applicable

2.7.6 User Constraints

UC-1 App should be more user friendly and which pleases user when he/she uses it.

2.8 Assumptions and Dependencies

AD-1 User should have sufficient knowledge of android OS.
AD-2 Device must be connected to internet to avail the services of this app.
AD-3 The users know the English, as this App will be provided in English language.

3 External Interface Requirements

3.1 Hardware Interface

HI-1 In hardware Interface, user needs smart phone connected to internet for using this app.

3.2 Software Interface

SI-1 App will communicate to MySQLLite Database to sign in, login and store and retrieve the data of Available services.
SI-2 App will also validate and verify the registered user in the app.

3.3 Communication Interface

CI-1 App will have a chatting system through which users can contact each other over app.

4 Functional Requirements

4.1 Requirements

4.1.1 Register as a member

1. User shall provide the following data to register himself as a member
    - Username
    - Password
    - Name
    - CNIC
    - Phone Number
    - Image
2. User shall click Register button to register his/her data.

4.1.2 Login as a member

1. User shall provide following data to Login as a member
    - Username
    - Password
2. User shall click login button to login as a member.

4.1.3 Search for carrier

1. Members can search for their required place available in vehicle for thier stuff to carry:
    - from city
    - to city,
    - unlimited number of carriers
    - Date
    - Time
2. Only members can avail the service of app
3. Only members shall contact other users for offer.

4.1.4 Cancel Offer

1. Members shall delete their offer,if he/she is not satify with the carrier.

4.1.5 Contact other users

1. Only members shall contact other users for availing the service offered by
    - chat over app.
    - Contact number(messaging,call).

4.1.6 View Details

1. Only members shall view the details of other users.

4.2 Use cases

4.2.1 Sign Up

User have to register himself for availing services of app.

Use case Id:SignUp	
Use Case Id:	SignUp:
Actors:	Sender/reciever,carrier and others who wan to use that service.
Feature:	He/She must SignUp to avail those service that app is providing them.

Pre-Condition:	User must install app in his/her smart phone.	
Senarios:		
Step#	Action	App Reaction
1.	User must fill the date(username,pasword etc)	Creation of new account in DB.
2.	User click SignUp Button	User is legally registered.
Alternative Scenarios:		
1AS.	Check if account is created than it won't create again with same username,contact number as well.	
Post Conditions:		
Step#	Description	
1.	If succesfully created account than account will be directed to logIn	
Referenced:		Relative use-case is login use-case

4.2.2 Login

User must login to App for availing the services

Use case Id:Login		
Use Case Id:	Login	
Actors:	Any user who wants to avail services of app.	
Feature:	Login is driven from signup use case. It is necessary for user to login for availing the services.	
Pre-Condition:	User must signup account.	
Senarios:		
Step#	Action	App Reaction
1.	User must fill the date(username,pasword etc)	Verify user name and password from database.
2.	User click login Button	Allow user for login.
Alternative Scenarios:		
1AS.	If user don't want to login the account then he may use the app as a visiting purpose.	
Post Conditions:		
Step#	Description	
1.	After login, user will have to select the service he/she wants to search for available carrier for their potential request.	
Referenced:		Login use case is related with signup use case

4.2.3 Search for Carrier

If user wan to search the carrier.

Use case Id: Search for Carrier	
Use Case Id:	Search for Carrier
Actors:	Any user who wants to Search for Available free carriers.

Feature:	Search for Carrier is not driven from any other feature as it can be used by visitor as well as member(registered user).	
Pre-Condition:	App should be installed in smart phone.	
Senarios:		
Step#	Action	App Reaction
1.	User Enter the date, from city,to city, and time as well.	List of all the carriers which satisfy the specifications will be retrieved from database.
2.	User click Search button.	List of Available required carriers will be shown to user
Alternative Scenarios:		
1AS.	If user wants to change the carriers then he can go back and change specifications	
2AS.	If user wants to change the city and time to avail the service respect to the requested carrier.	
Post Conditions:		
Step#	Description	
1.	If user select any carrier and user is visitor then he will be asked to login as a member to avail the service.	
2.	If user select any carrier and user is member then the details of that vacancy will be shown to user.	
Referenced:		Contact use case may be related to this.

4.2.4 Delete Offer

If user wants to delete his offer.

Use case Id: **Delete Offer**		
Use Case Id:	Delete Offer	
Actors:	User who is Registered as a member in this app.	
Feature:	Driven from Login use case	
Pre-Condition:	User should be logged in as member.	
Senarios:		
Step#	Action	App Reaction
1.	User select the offered service from his profile and click Delete Button	Record having specifications of that offer will be deleted from database.
Alternative Scenarios:		
1AS.	If user don't want to delete the offer and wants to avail other services then he may go back to avail other services	
Post Conditions:		
Step#	Description	
1.	User will be notified If his offer is deleted.	
Referenced:		login use case is related to login use case.

4.2.5 Contact other users

If user wants to contact other users in order to avail service offered by them.

Use case Id: **Contact Other Users.**		
Use Case Id:	Contact other users	
Actors:	User who is Registered as a member in this app.	
Feature:	Driven from Login use case.	
Pre-Condition:	User should be logged in as member.	
Senarios:		
Step#	Action	App Reaction
1. 2.	Select the user for details and contact. User selects the chat method.	Retrieve the details of user and contact details which also includes chat.
Alternative Scenarios:		
1AS.	if user don't want to contact the selected person, he may go back and select any other person.	
Post Conditions:		
Step#	Description	
1.	User will be directed to corresponding contact method.	
Referenced:		It is related to login use case.

4.2.6 View Detail

To view the details of any other user.

Use case Id: **view detail**		
Use Case Id:	View Detail	
Actors:	User who is Registered as a member in this app.	
Feature:	Driven from Login use case	
Pre-Condition:	User should be logged in as member.	
Senarios:		
Step#	Action	App Reaction
1.	Select the user for details	Retrieve the details of user and shown in the new screen.
Alternative Scenarios:		
1AS.	If user don't want to see details of the selected person, he may go back and select any other Person & service as well.	
Post Conditions:		
Step#	Description	
1.	User will be directed to screen containing details of selected user.	
Referenced:		login use case is related to login use case.

5. Non Functional Requirements

5.1 Usability Requirements

UR-1 App will be user Friendly by having simple and self-explanatory interface.
UR-2 User will be able to easily learn the application by just using it for the very first time.

5.2 Performance Requirements

PR-1 Only one function can be performed by this app at a time.
PR-2 App will be performing functions with response time of no more than 3 sec.

5.3 Safety Requirements

Not Applicable

5.4 Security Requirements

SR-1 User will need to authenticate himself as a member and login to the app as a member to avail the services of this App.
SR-2 CNIC or any other personal requirement will not be shown to others.
SR-3 Users who use this app as visitors will be allowed to search for the available required vacancy only. To avail the service, user has to login as member.
SR-4 Complete profile of other users will not be shown to visitors.

5.5 Robustness

ROB-1 If any type of error occurs in app, app will show appropriate message to user and any function will not be performed until that mistake is corrected.
ROB-2 If there is any Internet connection problem then app will also inform the user by giving appropriate message.

5.6 User Documentation

User manual will be provided to user along with the application.

6 References

Project Proposal that has been submitted for this project.

6 Appendices

1. **API :** Application program interface
2. **OS :** Operating System