

# Software Requirements Specification

Version 1.2

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All Types Of Tax and Business License  
Revenue Management

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## Revision History

Name	Date	Reason For Changes	Version
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SRS	8/8/2018	Features should have been more elaborate.	1.0
SRS	11/09/2018	No use case was added.	1.1

# 1. Introduction

## 1.1 Purpose

This document is intended to describe accurately the capabilities that the software product “All Types of Tax and Business License Revenue Management” should provide to its end-users and also to specify all the non-functional requirements that the application should implement, regarding subjects like: performance, availability, reliability, security, etc.

## 1.2 Document Conventions

This document uses the following conventions.

DB	Database
ER	Entity Relationship
KCC	Khulna City Corporation

## 1.3 Intended Audience and Reading Suggestions

This document is intended for developers, KCC, organization owners, general people of Khulna , testers and documentation writers. To understand the paper properly, one have to go through the sections one by one, beginning with the overview section.

## **1.4 Product Scope**

The purpose of this software is to collect the taxes from various organizations such as office,restaurants,house ,hotel etc. of Khulna which will help the KCC.

## **1.5 References**

- [https://www.tutorialspoint.com/software\\_engineering/software\\_requirements.htm](https://www.tutorialspoint.com/software_engineering/software_requirements.htm)

# **2. Overall Description**

## **2.1 Product Perspective**

A distributed Tax and Business License Revenue Management database system stores the following information.

- 1) Business organizations details: (for KCC authority)
  - i) Business starting date
  - ii) License issues details
  - iii) Business types
  - iv)Business owners' name, address and phone number.
  - v) Tax information
  - vi) Revenue details

- 2) Billing details: (for business organization authority)
  - i) Customers billing details
  - ii) Revenue Statement
  - iii) Tax statement
- 3) Cash memo: (for business organization authority and customers)
  - i) Customers details
  - ii) Date of booking/buying

## **2.2 Product Functions**

Some main functions of the product are:

- 1) Collecting tax informations for tax authority
- 2) Making easy licenses system for business authority
- 3) Keeping track on revenue and tax for business authority
- 4) Making cash memo for customers
- 5) Review submission among them
- 6) Software feedback for next update

## **2.3 User Classes and Characteristics**

There will be mainly three classes. Admin, Organization owners and general people. Organization owners will apply for license to the admin and administration panel will approve or reject. They will give a license number. Owners will make bill receipts in online and they will mention their license number and the taxes so KCC will be available to collect the taxes.

## **2.4 Operating Environment**

Operating environment for the airline management system is as listed below.

- relational database
- Model, view, controller system
- Operating system : any
- database : mysql
- platform : C#, javascript,html.css

## **2.5 Design and Implementation Constraints**

- 1) SQL commands for above queries/applications
- 2) The global schema, fragmentation schema, and allocation schema.
- 3) Implement the database at least using a centralized database management system.

## **2.6 User Documentation**

To use the product properly, there will be various components to help the user. Some of them are:

- User Manual: Will be attached
- Online Help: There will be a report option and an FAQ in the product.
- Tutorial Link: A tutorial will be uploaded for the user in the website.

## **2.7 Assumptions and Dependencies**

- 1) In bill making there may occur some problems.

- 2) Database server errors may occur
- 3) User may give false feedback.

## **3. External Interface Requirements**

### **3.1 User Interfaces**

Front- end software: html,css, bootstrap,javascript

Back-end software:C#,mysql

### **3.2 Hardware Interfaces**

A browser which supports CGI, HTML & Javascript.

### **3.3 Software Interfaces**

<b>Software used</b>	<b>Description</b>
Operating System	We have chosen Windows operating system for its best support and user-friendliness.
Database	To save the flight records, passengers records we have chosen mysql database.

asp.net	To implement the project we have chosen C#, js language for its more interactive support.
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### **3.4 Communications Interfaces**

The project will support all types of web browser. We are using metro UI for the license, billing forms etc.

## **4. System Features**

### **System Feature**

- 1) There will be admin and administration panel who will approve the request of license.
- 2) Organization owners will make bill in online where they will give their license number to help the KCC to understand the tax they need.

## **5.**

### **Safety Requirements**

If there is extensive damage to a wide portion of the database due to a disk crash. Therefore, administration panel should be careful in this case.

### **Security Requirements**

Security systems need database storage just like many other applications. However, the requirements of the security means that administration panel must work carefully.



## 6. Use case

Use case of All types of Tax and Business License, Revenue Management :

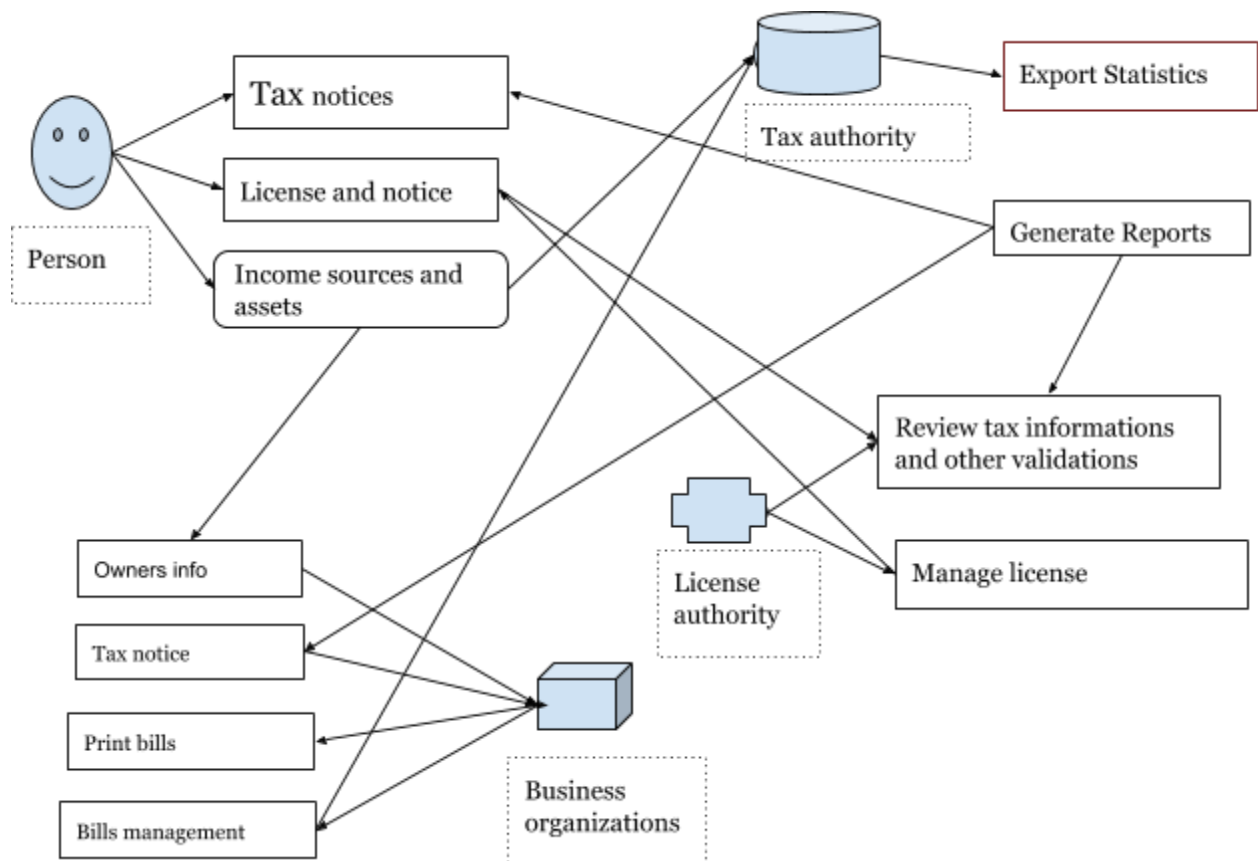


Figure : Use case of All types of Tax and Business License, Revenue Management

## Use case Descriptions:

### 6.1.1 Approve/Decline License no. request.

<b>Use Case Name:</b>	Approve/Decline License no. request
<b>Brief Description:</b>	This operation permits Admin to approve the license request from the organizer owner
<b>Priority</b>	Essential
<b>Trigger</b>	Admin choose to create a new entry.
<b>Precondition</b>	Admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1. Admin click on approval request or decline the license no. 2.The server send the result to the owner.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Admin Table of the Admin Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

### 6.1.2 Receive tax with License no.

<b>Use Case Name:</b>	Receive tax with License no.
<b>Brief Description:</b>	This operation permits Admin to receive tax with license no.
<b>Priority</b>	Essential
<b>Trigger</b>	Admin choose to create a new entry.
<b>Precondition</b>	Admin must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"> <li>1.Admin click the receive tax button and the tax go to the bikash or DBBL no. admin provided.</li> <li>2.Admin will click the ok button to confirm they have received the tax.</li> </ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Admin Table of the Admin Database
<b>Exception Path</b>	<ol style="list-style-type: none"> <li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li> </ol>

### 6.1.3 Request License no.

<b>Use Case Name:</b>	Receive License no.
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<b>Brief Description:</b>	This operation permits Organizer owner to request the admin for the License no.
<b>Priority</b>	Essential
<b>Trigger</b>	Organizer owner choose to create a new entry.
<b>Precondition</b>	Organizer owner must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"> <li>1.Organizer owner click the button request for license no. to admin.</li> <li>2.The server send the request to the admin.</li> </ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Organizer owner Table of the Organizer owner Database
<b>Exception Path</b>	<ol style="list-style-type: none"> <li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li> </ol>

#### 6.1.4 Making cash memo with License no.

<b>Use Case Name:</b>	Making cash memo with License no.
<b>Brief Description:</b>	This operation permits Organizer owner to make the cash memo for the customers
<b>Priority</b>	Essential
<b>Trigger</b>	Organizer owner choose to create a new entry.
<b>Precondition</b>	Organizer owner must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"> <li>1.Owner click the button cash memo.</li> <li>2.The server send him a form of cash memo with his license no.</li> <li>3.Owner fill it up for the customers.</li> </ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Organizer owner Table of the Organizer owner Database
<b>Exception Path</b>	<ol style="list-style-type: none"> <li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li> </ol>

#### 6.1.5 Sending tax with License no.

<b>Use Case Name:</b>	Sending tax with License no.
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<b>Brief Description:</b>	This operation permits Organizer owner to send tax with license no to the admin.
<b>Priority</b>	Essential
<b>Trigger</b>	Organizer owner choose to create a new entry.
<b>Precondition</b>	Organizer owner must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	<ol style="list-style-type: none"> <li>1.Owner click the send tax button.</li> <li>2.Then they send tax to the bikash no and click the button ok.</li> <li>3.The server wait for the response of the admin.</li> </ol>
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Organizer owner Table of the Organizer owner Database
<b>Exception Path</b>	<ol style="list-style-type: none"> <li>1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.</li> </ol>

#### 6.1.6 Giving Feedback

<b>Use Case Name:</b>	Giving feedback.
<b>Brief Description:</b>	This operation permits Customer to give feedback to admin
<b>Priority</b>	Essential

<b>Trigger</b>	Customer chooses to create a new entry.
<b>Precondition</b>	Customer must be connected to the Internet and on the Entries page.
<b>Basic Path</b>	1.Customer will click feedback button. 2.Then server will show him page where he can give feedback to the admin.
<b>Alternate Path</b>	N/A
<b>Post condition</b>	A record is created in the Customer Table of the Customer Database
<b>Exception Path</b>	1. If the connection is terminated before the form is submitted, the fields are cleared and the Server is returned to the wait state.

## 7. Questionnaire

For the betterment of our project, we will do a Q&A survey from business organizations, KCC licence authority, KCC business authority and general people from Khulna.

- Target people :
  - Tax License authority
  - Lawyer
  - Business Authority
  - General people
- Interview Type : Open and closed both.
- General Questions :
  1. What types of tax and license are managed by KCC?
  2. How existing tax and license management system runs?
  3. Who are engaged with it by whom ?

4. Is there any online process ? How do they implement it ? How much strong it is ? How much money we can collect if we have a online process? Recording system?
5. How people are concerned about this ?
6. Is the amount of tax collection is satisfactory ?
7. What are the problems we have to face while collecting tax?
8. How it can be removable with existing system?
9. Can the authority manage the huge data ?
10. What is the existing data management system?
11. Why the authority cannot collect tax properly ?
12. How general people salvo tax, is there any system problem ?
13. Is there any conflict with Business owner and person tax management?
14. Do you think that digitalization is the solution of these existing problems ?
15. Can our system help for this purpose ? How ?
16. Is it possible to replace existing system with our system ? why ?
17. What are the problems we have to face to implement our system in real life ? what are challenges of our system ?
18. Do you think we have to add more questions in our research ? What are the questions ?

- Data Collection / survey Form :

Role :	User ID :	Phone :
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Name :	
Address :	
Profession :	



❖ FAQs about Tax

1.	Tell me a suggestion you have made that was implemented in this tax/license field ?
2.	What experience do you have in this tax field ?
3.	What/how do you know about this ? [advertise]
4.	How do you want to see this system ? What will be beneficial for you?
5.	Do you have any questions to ask us ?

❖ General Questions and answers :

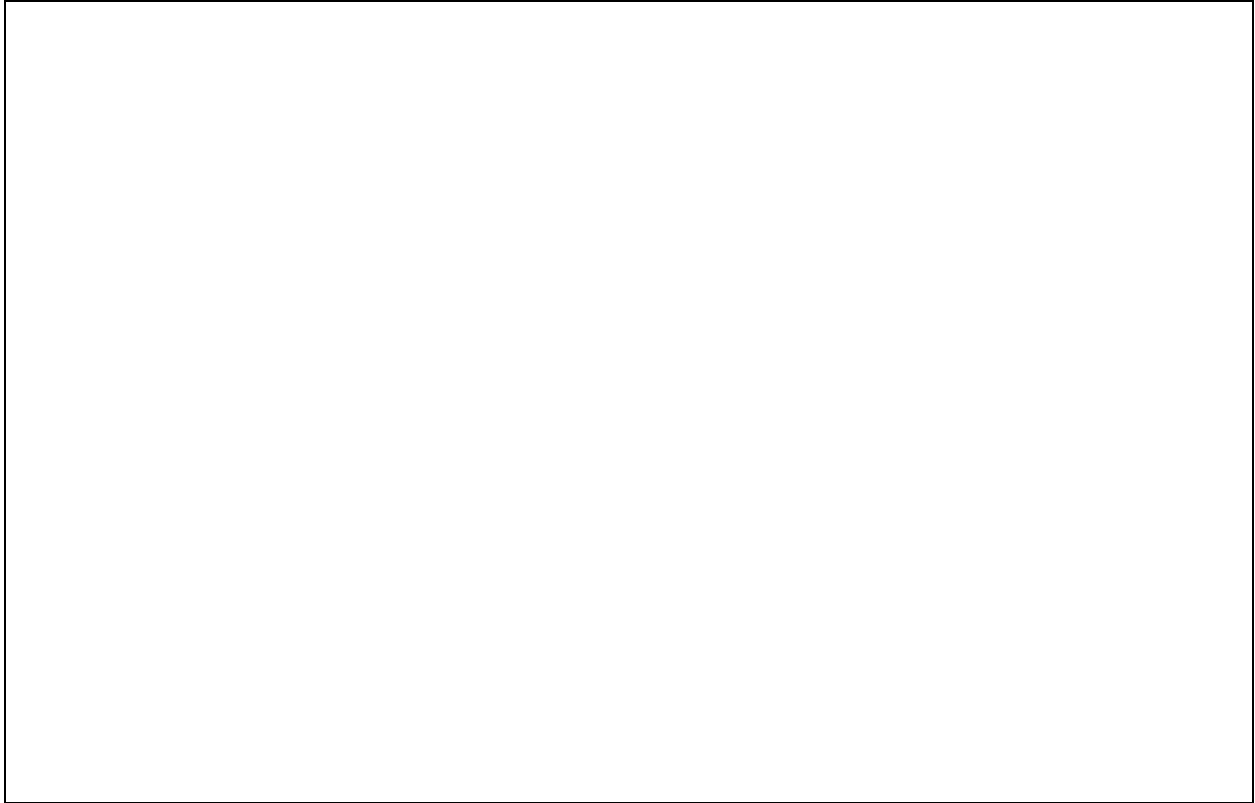
1.	What types of tax and license are managed by KCC?
Answer :	
2.	How existing tax and license management system run?
Answer :	
3.	Who are engaged with it by whom ?
Answer :	

4.	<ul style="list-style-type: none"> <li>a. Is there any online process ?</li> <li>b. How do they implement it ?</li> <li>c. How much strong it is ?</li> <li>d. How much money we can collect if we have a online process?</li> <li>e. Recording system?</li> </ul>
Answer :	<ul style="list-style-type: none"> <li>a. Ans :</li> <li>b. Ans:</li> <li>c. Ans:</li> <li>d. Ans:</li> <li>e. Ans:</li> </ul>
5.	How people are concerned about this ?
Answer :	
6.	Is the amount of tax collection is satisfactory ?
Answer :	
7.	What are the problems we have to face while collecting tax?
Answer :	
8.	How it can be removable with existing system?
Answer :	
9.	Can the authority manage the huge data ?
Answer :	
10.	What is the existing data management system?
Answer :	
11.	Why the authority cannot collect tax properly ?
Answer :	

12.	How general people salvo tax, is there any system problem ?
Answer :	
13.	Is there any conflict with Business owner and person tax management?
Answer :	
14.	Do you think that digitalization is the solution of these existing problems ?
Answer :	
15	a. Can our system help for this purpose ? b. How ?
Answer :	a. Ans:  b. Ans:
16.	a. Is it possible to replace existing system with our system ? b. Why ?
Answer :	a. Ans:  b. Ans:
17.	a. What are the problems we have to face to implement our system in real life? b. What are challenges of our system ?
Answer :	a. Ans:  b. Ans:
18.	a. Do you think we have to add more questions in our research ? b. What are the questions ?
Answer :	a. Ans :  b. Ans:

Comment/opinion about this survey :

❖ Any figure if necessary :



## 8. Software Architecture

The process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system.

- (a) User Interface :
- (b) Facade
- (c) Business Access Layer
- (d) Data Access Layer
- (e) Database

**Class diagram :**

Person (owner)
Name Address
add_business() license_req() license_info() tax_info()

Business
Name Address Type
owners() renewal() vat() build_cash_memo() print_bill() license_info() tax_info()

License
Name of the authority Address details
manage_license_req() send_license_info() show_tax_info()

Tax
Name of the authority Address tyoe details
mange_business_taxes() license_info() send_tax_info()