International Islamic University Chittagong(IIUC)

Computer and Communication Engineering(CCE)

LAB REPORT -02

1. A report on The **Systems Development Life Cycle (SDLC)** that we have followed.

2. Draw **Data Flow Diagrams** including (i) **Context Diagram**, and (ii) **Logical and Physical DFDs** for our selected project work.

Course Code: CCE-3508
Course Title: System Analysis, Design and Development Sessional

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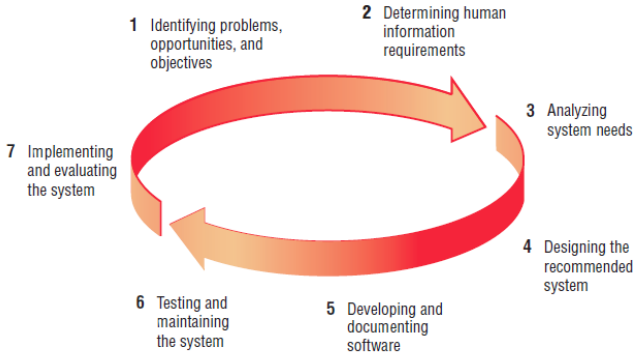
The **Systems Development Life Cycle (SDLC)** that we have followed:



1. Identifying Problem:

The bus transportation system that is utilized at the counter is an internal system that is used to sell bus tickets manually. The issues facing the company are that customers have to go to the counter to buy bus tickets or ask for bus schedules. Customers will also have to wait for a long time in order to get a bus ticket and will also need to pay cash when they buy the bus ticket.

2. Determining human info:

This is the phase where we go on the field and interview an existing company (Admin)and also some end user as what they think and want for the system. Here we also discuss various problems and benefits of the idea. We also get our information from reliable online sources like-gitlab.com, GitHub.com, and we had a question session for the mass population

3.Analizing system need:

We use all the process step by step. We use some special tools and techniques like-where we show input and output process, logical and physical dfd, context diagram. By all these processes, we get a fine grasp of what we are dealing with and we understand all the pros and cons of the system by using Data flow diagram.

4. Designing the recommended system:

In the design phase of the SDLC, we use the information collected earlier to accomplish the logical design of the information system. We design procedures for users to help them accurately enter data so that data going into the information system are correct. In addition, we also provide the users to complete effective input to the information system by using techniques of good form and web page or screen design.

5. Developing and documenting software:

Developing and Documenting Software In the fifth phase of the SDLC, the analyst works with programmers to develop any original software that is needed. During this phase, we work with users to develop effective documentation for software, including procedure manuals, online help, and websites featuring frequently asked questions (FAQs) or Read Me files shipped with new software. Because users are involved from the beginning, phase documentation should address the questions they have raised and solved jointly with us. Documentation tells users how to use software and what to do if software problems occur.

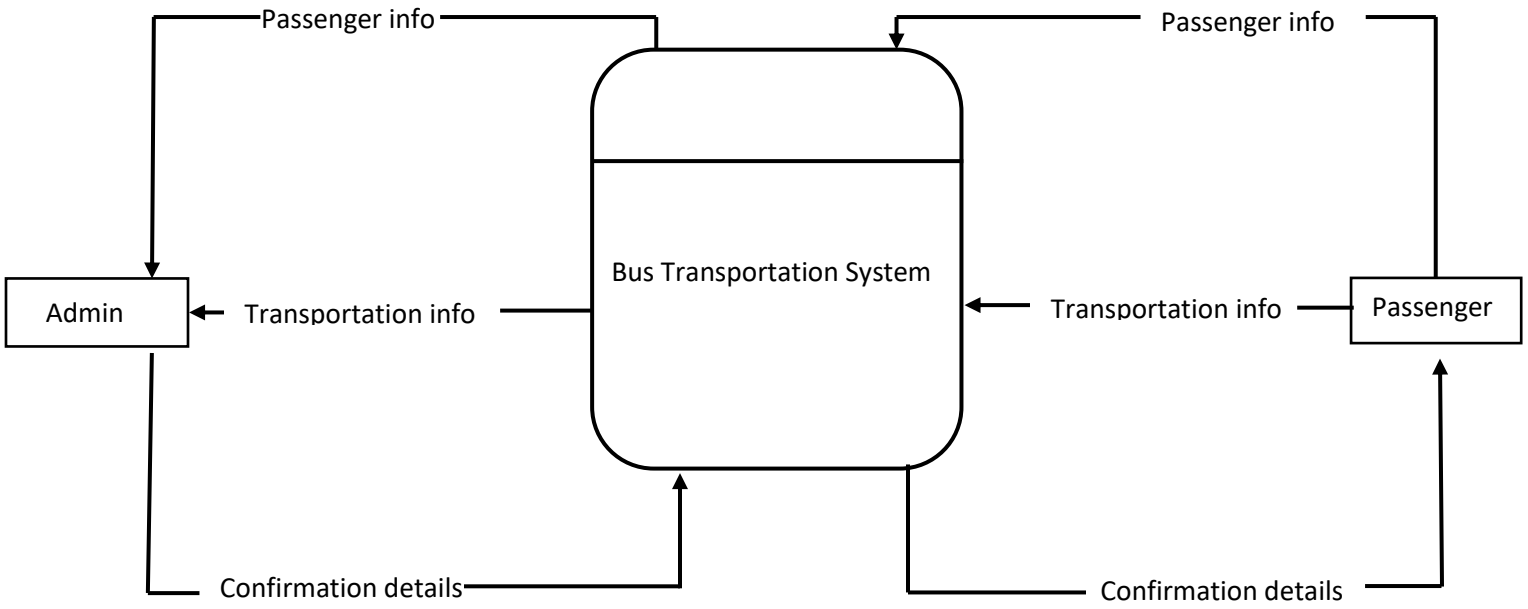
6. Testing and maintain the system:

In this phase, we work with the programmers to test the website to check if there are any bugs. We also provided some user a beta version for few weeks before the official launch. We also recruited a team of programmers to maintain the website and to update the website every week to keep things fresh for the users.

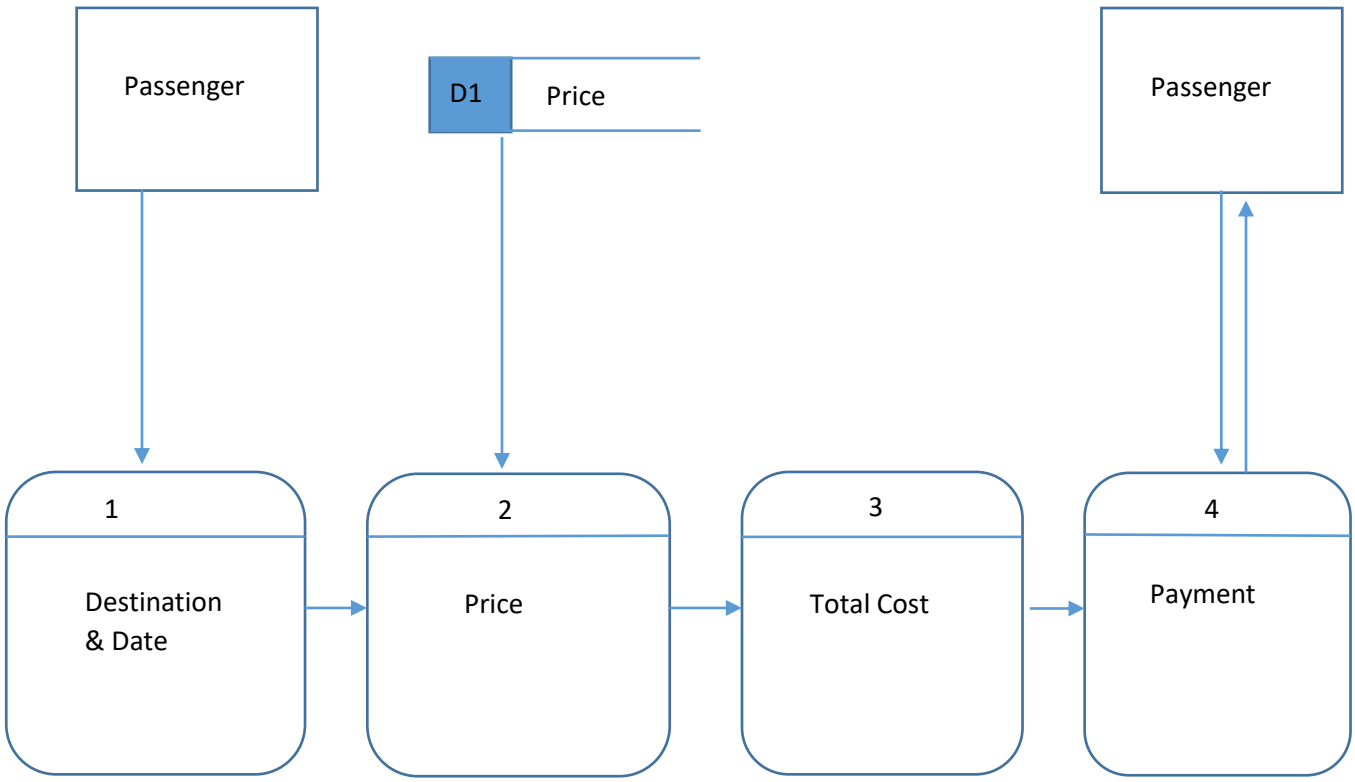
7. Implementing and Evaluating the System:

In this last phase of systems development, the analyst helps implement the information system. This phase involves training users to handle the system. Vendors do some training, but oversight of training is the responsibility of the systems analyst. In addition, the analyst needs to plan for a smooth conversion from the old system to the new one. This process includes converting files from old formats to new ones or building a database, installing equipment, and bringing the new system into production.

DFD: (i) Context Diagram



Logical DFD


Passenger
D1
Price
Passenger
1
Destination
& Date
2
Price
3
Total Cost
4
Payment

Physical DFD