

METRO FIBER

Using Cairo's subway for delivery

Project Planning Phase



ISD 100—Introduction to Systems & Informatics

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Students' Project

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PROJECT NAME	PROJECT NUMBER
Metro Fiber	327SU/IT/2020/5
DATE	REVISION NUMBER
24 th May 2021	2

1. Project Description and Goals

Metro Fiber is a corporation that delivers items and is now expanding quickly, but it uses Cairo Metro rapid transport. This company competes to give the greatest service to consumers, both in terms of delivery speed and the safety of items to their destination. The demand for goods delivery has now become the primary need of every individual. To ensure that their items arrive at the proper time and place, all individuals require fast and secure delivery of goods.

Many businesses have ended up delivering goods to suit these demands. Metro Fiber, in collaboration with Cairo Metro, is one of them. Cairo Fiber is the option for consumers who wish to send goods and other documents in Cairo. This delivery of goods has a wide variety; however, Cairo Fiber is only available in Cairo due to Cairo Metro location restrictions.

The advancement of technology has now played a significant part in the life of modern civilization. With the advancement of information technology, individuals may easily obtain information in their daily lives. This involves tracking the progress of goods delivered via a freight forwarder. Using internet technology, which is now not viable due to Cairo Fiber's paper-based methods.

They requested the development of a system for exporting statics, which will allow the public to get information more quickly and conveniently. Customers can use this software to find out where their goods are, what their status is, and how far they have progressed.

The Cairo Fiber system's goals are as follows:

1. Make it easier to deliver information to customers on the status of goods sent.
2. Easier and faster processing of data.
3. Provide information quickly and accurately.

2. Scope Definition

The **following** are the limitations of the Cairo Fiber system project:

- It is a site with a mobile-friendly UI that will be widely used by everyone who has an online connection from various circles.
- The site is only accessible to Metro Fiber staff and consumers.
- The geographic data used is from Google Maps.
- The results of input data from each Metro branch or transit are used to generate package data.
- Estimated pricing calculation data based on data implemented from Cairo Fiber papers.

Functional Requirements:

- The system enables consumers to find information on the whereabouts of goods that have been transported.
- The system can calculate projected costs.
- The system enables customers to discover information on the location of the nearest Metro station.
- The system enables logistics employees to obtain verification information to avoid fraud.
- The system enables logistics personnel to adjust the status of goods delivery in real time and keep it up to date.
- The system provides the administrator with a history of transaction processes as well as ongoing transaction processes.

Non-Functional Requirements:

- Performance
 - The system is expected to reduce the amount of time required to complete each job. The less time it takes, the greater the throughput that may be generated. The magnitude of this increase is based on the nature of the process or work.
- Information
 - This approach will prevent data redundancy and retrieval. It will keep data accurate and consistent. Data accuracy and consistency are essential to avoid errors in data access required for tracking.

Data correctness can be maintained by limiting recording errors, while consistency may be maintained via proper database design.

- System Control
 - When the server goes down, for example, due to a blackout, the system is required to keep a backup of the data it requires. Data access cannot be halted, or the server shut down using this data backup. Furthermore, the system can maintain the security of data that is stored, particularly secret data, so the system requires a login function.
- Effective
 - The system is expected to speed up data access and make it easier for participants to access all the system's services.

3. *Project Milestone*

An overview of the project schedule that will be followed:

Project Milestone	Target Date
Planning	24th May 2021 - 25th May 2021
Analysis	25th May 2021 - 27th May 2021
Design and Prototyping	29th May 2021 - 5th June 2021
Implementation and Deployment	5th June 2021 - 7th June 2021
Testing and Integration	7th June 2021 - 8th June 2021
Support	9th June 2021 - 9th June 2022

4. Assumptions, Constraints, and Dependencies

Assumption

- This project is expected to solve the problem of tracking consumer goods of Cairo Fiber, avoid fraud, scheduling, and ability to add other features.
- This project is expected to increase the number of consumers who send goods via Cairo Fiber. The application trial period is carried out for one day.

Constraint

- This system is web based.
- The site is only accessible to Metro Fiber staff and consumers.
- The geographic data used is from Google Maps.
- The results of input data from each Metro branch or transit are used to generate package data.
- Estimated pricing calculation data based on data implemented from Cairo Fiber papers.

5. Project Risks:

Several potential risks are present in this Cairo Fiber site system, including:

1. User requirements are subject to change at any time.
2. There may be a data breach.
3. There is little stakeholder participation in the entire process.
4. During the system testing process, there was a bug that was not in accordance with the method.

5. List of Deliverables

This section describes the documents that will be provided with the system, which includes:

SDP (Software Development Plan), SRS (Software Requirement Specification), SAD (Software Architecture Development), TSTPLN (Test Plan) and User Documentation, as well as the results of planning.

SDP Software development plans assist team members in working in line with their assigned duties; it is believed that a clear division of work would result in an information system that will solve company problems.

SRS A document that outlines the many requirements that a software developer must meet. After collecting information from a software user, a software engineer prepared this document. Its production should also conform to current standards that are widely known by software engineers throughout the world. As a result, the standards that will be described here are IEEE standards.

SAD is a document that specifies the architecture of a software project that will be worked on. An overview of the document, architectural representation, architectural goals and constraints, use-case view, or a representation of the process' functionality, and logical perspective are all included in this document.

TSTPLN identifies project information and device component software, provides a list of requirements to be tested, advises, and specifies the testing technique to be utilized, specifies the needed requirements, and specifies relevant applications.

6. Cost Estimation

The needed execution cost will be \$100,000 to fund all the Cairo Fiber system developmental project, this covers hardware, software, testing, and training and support.

Project team members are taking 10% of software development cost estimation.

7. Project Organizational Structure

Position	Members
Project Manager	Mohammad Mamoun
Technical Lead	Youssef Hossam
Analyst	Mohammad Mamoun
Database Analyst	Mohammad Mamoun, Youssef Hossam, and Shrouk Badawy
Programmer	Mohammad Mamoun, Youssef Hossam, and Shrouk Badawy
Designer	Mohammad Mamoun, Youssef Hossam, and Shrouk Badawy
Quality Assurance	Youssef Hossam

8. Project Authorization

This project has been approved by the project manager and project sponsor.

APPROVED BY	Project Manager Mohammad Mamoun	Date 25 th May, 2021
APPROVED BY	Project Sponsor Cairo Metro	Date 25 th May, 2021