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PROJECTX COMPLETION REPORT

TECHNICAL WRITING

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1 Project Idea:

X (Business Holder) wants to open a new delivery service on his locality. He thinks it has great potential and is profitable. He has arranged some local drivers who will be carrying goods door to door. Now for marketing, he uses social media for publicity. His business operation is based on phones. He receives orders over the phone. Then send a photo of the order to one of his currently available drivers. The driver, later on, collects items and carries them to the customer's home. Finally, the customer checks every item and the bill for the order and pays for the service.

Y (Customer) thinks he can use X's service. This service will save him time. He really does not want to visit crowded local bazar at this hot and humid weather. But he finds it difficult to connect one of the phone numbers provided by X. Y is hoping X will start taking orders from apps or sites. It would be much better for him.

So what we want to provide X is a web platform where his customers will place orders. If they prefer over phones then X will initiate a new order for his service, where he will place an order on behalf of his customers. This service will generate a better invoice which X will send to his employee. At the end of the day, it will be easier for X to keep track of his daily business. Moreover, this can help X's business to grow better. And X will use this provide as pay peruse. We will be taking care of his all technical issues.

We can provide this service to any local delivery business around the country.

2 Project Summary:

2.1 Project Background:

The ongoing problem for a customer and business-holders is unable to connect with one-another instantly and connecting takes too long. Besides, there is no list of orders which is done by traditional way like over phone or offline. Business holder also can not keep the track of business by the traditional way. It is also quite impossible for a business holder to extend his business area because of the distance from his shop. Customers also unable to take better services because of the distance of the shop which give better service. Both customers and business holders have to worry about the ongoing problem because of their own interest.

2.2 Project Objectives:

1. Connecting customers and business holders instantly.
2. Keeping history of orders for both business holder and customers.
3. Keeping the track of delivery-man for giving wide services.
4. Generating invoices for the customers and business holders.
5. Getting more audience through internet so that both business holders and customers can have better service.

3 Project Methodologies:

3.1 Front End:

- ReactJS for the front-end.
- CSS for styling front-end.

3.2 Database:

- MySQL
- Database Design

3.3 Framework(Environment):

- NodeJS with Express

3.4 Cloud Services:

- Google Cloud Service

3.5 OTP Services:

- Twilio Service

3.6 Version Control:

- Github

4 Requirements:

4.1 Use Case Diagrams

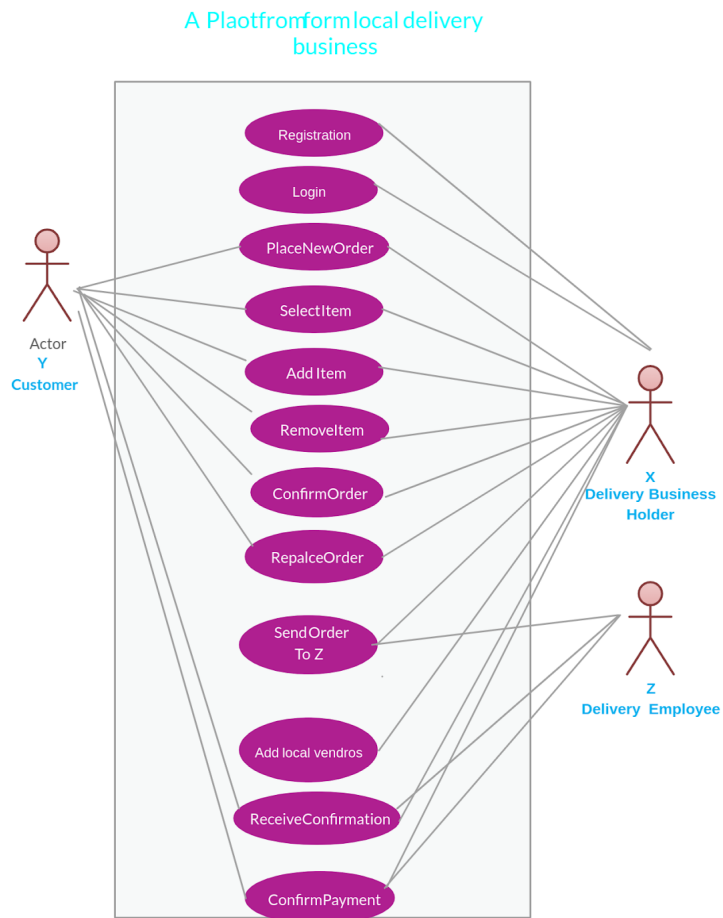


Figure : UseCaseDiagram

4.2 Functional Requirements

4.2.1 Business Holders:

- Registration/login
- Update Profile
- Receives Order from customers
- Initiate Order for customers
- Create Services (Laundry, Grocery, Ticket, Medical Report)
- Manage Business
- Generate invoice
- Inventory
- History

4.2.2 Customers:

- Registration/login
- Update Profile
- Select services (Laundry, Grocery, Ticket, Medical Report)
- Select preferable local vendors (Local service providers)
- Place new Order
- History of previous orders

4.3 Non-Functional Requirements

4.3.1 Usability

Upon authentication, customer can create an order function in two-three clicks.

4.3.2 Security

Only a certain category of users may access data on payments and transactions.

4.3.3 Scalability

The website should be able to support 500 users simultaneously.

4.3.4 Performance

Website page load time should not exceed 2 seconds.

4.3.5 Availability

Service downtime shouldn't exceed 20 minutes. The users should be redirected to a front website page during the downtime period.

4.3.6 Portability and compatibility

The website should work with all kind of operating systems and browsers.

4.3.7 Appearance

The software shall comply with corporate branding standards. The product shall be attractive to a teenage audience.

5 Input Data and Validation:

Input Data and Validation of Project on Online Food Ordering System:

- All the fields such as Login, Registration, Cart, Customer Info, Service Provider Info, Employee Info are validated and does not take invalid values.
- Avoiding errors in data.
- Integration of all the modules/forms in the system.
- Recording of all the reproduced errors.
- Modifications done for the errors found during testing.
- Validations for user input.
- Testing of the functionality involving all type of calculations etc.

6 Testing:

6.1 Unit Testing:

Each module is considered independently. it focuses on each unit of software as implemented in the source code. it is white box testing.

6.2 Integration Testing:

Integration testing aims at constructing the program structure while at the same constructing tests to uncover errors associated with interfacing the modules. modules are integrated by using the top down approach.

6.3 Validation Testing:

Validation testing was performed to ensure that all the functional and performance requirements are met.

6.4 System Testing:

It is executing programs to check logical changes made in it with intention of finding errors. A system is tested for online response, volume of transaction, recovery from failure etc. System testing is done to ensure that the system satisfies all the user requirements.

7 Achievement of Project Purpose:

Planned vs Actual Performance	
Achievement	
Indicator	Actual at Completion
faster to order for customers	Achieved. Customers can order from any service providers less than one minute. The process of creating an order is so easy for a new customer.
Better and easier communication between business holders and customers	Achieved. Customer can easily contact to the service providers as he/she can see the providers' info while ordering. Service providers also can see the customer info while collecting orders. Later, they can contact each other with the info if needed.
Transparency in pricing	Achieved. Service providers and customers can see the pricing of the product on the website properly and there is no hidden charge for the customers.
Less cost in communicating and ordering	Achieved. Customers can simply create an order and can contact with the service provider if any special instruction is needed and vice versa.
Better system for monitoring the business for holders	Achieved. Service providers can see the statistics of their sell between dates which help them to supervise their business.

The software fulfils all the expectations according to the purpose of this software. According to the project proposal, the software should work given on the functional and non-functional requirements. And after completing the software implementation, it matches with all functional and non-functional requirements and gives the correct output. So, we can say that the software achieves all the project purposes. There are no unexpected behavior from the software.

8 Project Output:

Features,Expected Output and Actual Performance of the software is shown below

Requirements	Expected Performance	Actual Performance
Customer Side		
Registration	Customers can register on the website giving his username and phone number	Achieved.By giving username and correct phone number customers can successfully register in the website.
Login	Customers can login with the phone number given on the registration process	Achieved.Customers can login with the number given in the registration process.
OTP	Customers should get an otp on their registered phone number	Achieved.Server sends otp to the registered number of a customer.
Update Profile	Customers can update his/her profile after successfully logged in	Achieved.Customers can update his username in the update profile option only when he/she is successfully logged in.
Selecting Local Vendors	Customers can select his local vendors by selecting his location from drop down box and can see all type of local services in his areas	Achieved.Customers can select his local address from the drop down box and can see the local vendors and can select the services given by the local vendors.
Cart	Customers can see the products he/she selected from the local vendors and can checkout from the cart.He can see all the expenses and can remove the products he unintentionally selected.	Achieved.Customers can see the products in cart and can see the price of the products and their amount and can remove any product.He also can go to checkout and can do more shopping from the website if he/she intends to do so.

Checkout	Customers can see the products he/she selected from the local vendors and he can add address in the checkout page or can select the previous addresses he used for an order in previous.He can see all the expenses.	Achieved.Customers can see the products in checkout and can see the price of the products and their amount.He can add address or select any previous address he used.He also can add description for the delivery guy.
History	Customers can see all the previous orders	Achieved.Customers can see all previous orders.He can see the payment amount and can see the products' details and their amount.He can also see the used address for his orders.
Theme	Customer can change his theme between light or dark	Achieved.There are two theme in the website which are dark and light.
Service Provider Side		
Registration	Service providers can register on the website giving his username,phone number,NID number,Trade License Number,Service Type,Delivery Charge,Descriptions	Achieved.By giving the required info service providers can successfully register in the website.
Login	Service providers can login with the phone number given on the registration process	Achieved.Service providers can login with the number given in the registration process.
OTP	Service providers should get an otp on their registered phone number	Achieved.Server sends otp to the registered number of a service provider.
Update Profile	Service provider can update his/her profile after successfully logged in	Achieved.service providers can update his info in the update profile option only when he/she is successfully logged in.

Orders	Service Provider can see all the orders he got and can complete his order by actions	Achieved.Service provider can see all the orders and necessary details for the orders like customer address,phone,ordered time.He/She also can see the product details in the order list.
History	Service providers can see all the previous orders he/she delivered	Achieved.Service providers can see all previous orders.He can see the payment amount and can see the products' details and their amount.He can also see the customers' address for the orders.
Statistics	Service provider can see the number of orders he got between two dates,he/she can see the number of delivered orders and can see the total income	Achieved.Service provider can see the number of orders he got between dates,can see the number of delivered orders and can see the total income.
Add Product	Service providers can add product in his inventory	Achieved.Service providers can add product with product name and its price.
Inventory	Service provider can see his/her inventory and can update any product details or can remove any product from his/her inventory	Achieved.Service provider can see the inventory and can update or remove any item from the inventory/
Service Area	Service providers can extend the area of his delivery or can shorten the area he/she wants to deliver	Achieved.Service provider can add more area or remove from his delivered area.

Employee	Service provider can add or remove or update his own employee	Achieved.Service provider can add/remove/update his employee list.
Theme	Service provider can change his theme between light or dark	Achieved.There are two theme in the website which are dark and light.

9 Lessons learned from the project:

- Development resources, used throughout the project, were rather inadequate.
- Overall project goals and requirements could not be frozen early enough.
- Start small, then extend.
- Add logging and error handling early.
- Test the parts before the whole.
- Everything takes longer than one think.
- First understand the existing code.
- Fix the known errors, then see what's left.
- Finally, Keep learning.

The result — as the software itself goes — turned out to be according to the goals and expectations. The experience gained in the area of project management is still being distilled.

10 Success of the project:

As there were clear objectives and requirements for the website, it was easier to get the output as intended. More documentation can increase any software's or project's success rate. To start a project, there must be a plan before executing the project. There could be change in the middle of project but there should always be a plan. To avoid any unwanted output, one should follow the best practices. As the website was built while keeping these details in the head, it can be said that the project was successful. It matches all the expectations from the requirement and performs accordingly as intended. We rate it overall as an outstanding success.

11 Next Steps:

Some features can be added in the next development phase.

11.1 Customer Side:

- GPS order tracking: The ability to track the current location of package and the time of arrival using location services could be added.
- In-app messaging : integration with phone calls is needed to re-schedule the delivery or contact the driver after the order has been accepted.
- Rating system: The ability to rate the courier and leave feedback.
- Push notifications for cases when the order is on the way or has arrived

11.2 Service Provider Side:

- In-app messaging: for communication with the customers.
- Delivery status: A delivery man can update the customer when he has accepted/rejected the order, picked it up and delivered.
- Ratings and feedback: For complete transparency, not only the customers, but the service providers should also be able to rate their customers and leave feedback about the order.

12 Conclusion:

By using this website, customers will be more interested to buy services from local vendors as it will save their time and reduce their efforts. On the other hand, it will also give chance to the service providers to connect with more people and enhance their business. Moreover, it will create a remarkable job opportunity as it includes delivery system and needs riders. So, hopefully this app will come in handy and turn out to be a sustainable one.

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