

**MINI PROJECT-2**  
**(2018-19)**

**DECH**

Software Requirement Specifications

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## **1. INTRODUCTION**

### **1.1 Purpose**

This is the software Requirement Specification for our web store “DECH”. Our project is all about e-shopping (A type of E-commerce). It will facilitate the user (customers) to purchase things without going to store. It will address the shopping related problems.

The main purpose for developing this “DECH” project in Django is to manage all details about product, product type, company, order, order item etc. there are two types of user available in this project , the first one is customer and other is admin .

### **1.2. Scope**

E-Commerce is more than just buying and selling products online. It also includes the entire online process of developing, marketing, selling, delivering, servicing and paying for products and services. India has shown tremendous growth in the E-commerce segment.

### **1.3 Definitions, Acronyms, and Abbreviations**

#### **Abbreviation**

OSS : Online Shopping System

SRS : Software Requirement Specifications

GUI : Graphical User Interface

DFD : Data Flow Diagram

#### **Definitions**

**Django** : Django is a Python-based free and open-source web framework, which follows the model-view-template architectural pattern.

**Customer** : The end user will be the one who visit the website and buys the products online.

**Product** : A product is the item offered for sale . The price that can be charged depends on market, quality ,marketing and the segment that is targeted . Each product has the useful life after which is needs replacement and the life cycle after which it has to be reinvented .

**Admin** : Administrator are the one who add or adminstrate the category for the product .

## 1.4 References

youtube : [https://www.youtube.com/results?search\\_query=ecommerce+website](https://www.youtube.com/results?search_query=ecommerce+website)

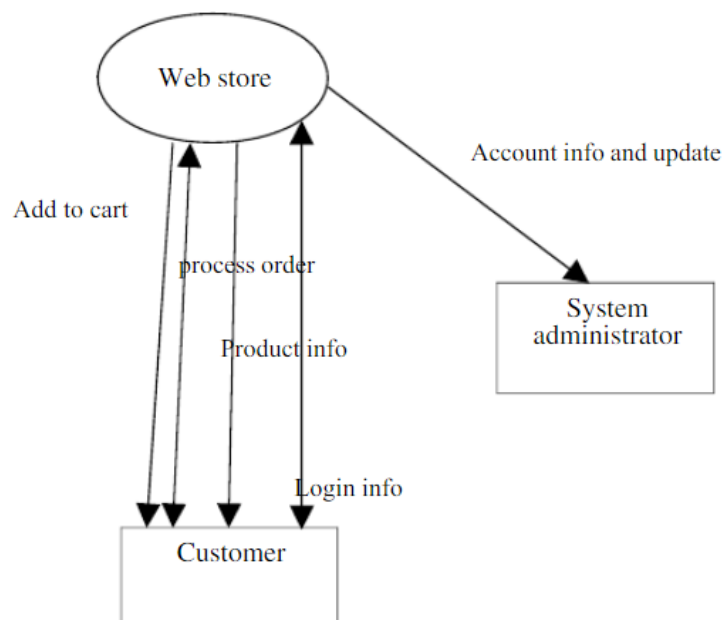
Wikipedia : <https://en.wikipedia.org/wiki/E-commerce>

Udemy : <https://www.udemy.com/python-and-django-full-stack-web-developer-bootcamp/>

## 2. General Description

### 2.1 Product Perspective

It is the online shopping website based on e-commerce is an outstanding way of bringing seller and customer on an online platform to make purchase in a secured and efficient manner irrespective of distance between the two.



## **2.2 Product Functions**

- Provide a simple interface and platform to ease the process of buying as well as selling products online.
- Include smooth functionality and efficiency that adds the buyers confidence.
- Tracking features of orders and pending delivers for both sellers and buyers.
- Notifying order and delivery report to customers and sellers.
- Ads and promotion activity motivate shoppers to buy online.

## **2.3 User Characteristics**

### **2.3.1. Customer :**

He or she is a verified user of website who is intended to buy a product from the seller via the Dech platform. The customer must have a username and password to make a purchase. The person is regularly updated and fed with latest offers and discounts according their interest.

### **2.3.2. Seller :**

He or she is a verified person who is allowed to sell items over the platform. Seller's details are stored on database and all the products are listed under him that he is ready to sell or are available. He is responsible to set products details, price, and quantity.

### 2.3.3 Administrator :

He or she is responsible for monitoring functions and procedures on platform. Administrator is responsible to provide valid information of a purchase to the concerned authority in case of any dispute between the customer and seller or in case of exchange.

## 2.4 General Constraints

## 2.5 Assumptions and Dependencies

- The customer and seller must have basic knowledge of computers and English language.
- Each User must have a User ID and password.
- Each Seller must have Seller ID and password.
- There must be an Administrator.
- Internet connection is a must.
- Proper browsers should be installed in the user's system.

## 3. Specific Requirements

This subsection contains the requirements for the e-store. These requirements are organized by the features discussed in the product functions. Features from there, they are then refined into use case diagrams and to sequence diagram to best capture the functional requirements of the system.

### 3.1 External Interface Requirement

#### 3.1.1 Software Interfaces

- **HTML** :- Page layout has been designed in HTML.
- **CSS** :- CSS has been used for all the designing part.
- **Javascript** :-All the validation task and animations has been developed by Javascript.
- **Python** :- All the business logic has been implemented in Python.
- **MYSQL** :- MYSQL database has been used as database for the project.

- **Django** :- Project has been developed over the Django framework.
- **Pycharm** :- PyCharm is an integrated development environment used in computer programming, specifically for the Python language.

### 3.1.2 Hardware Interfaces

- **Windows** :- This Project can easily be configured on Windows operating systems. For running this project on windows system, you will have to install Python3.5, PIP, Django.
- **Linux** :- We can run this project also on all versions of linux operating system.
- **Mac** :- We can also easily configured this project on Mac operating system.
- **Processor** :- Intel processor are used on both client and Server System.
- **Hard Disk** :- 1GB hard disk on client system and 1TB hard disk on Server System.
- **Ram** :- 8 GB Ram are used on server System.

### 3.1.3 User interface

- Homepage containing products according to customer's interest.
- There will be a screen displaying information about all products that user searches. If the customers select any product then it will open another tap about the product information.

## 3.2 Functional requirements:

### 3.2.1 Provide shopping cart facility -

- The system shall provide shopping cart during online purchase.
- The system shall allow user to add/remove products in the shopping cart. Later customer can confirm orders for purchase.

### 3.2.2 Online tracking of shipments -

- The system shall allow user to enter the order information for tracking.



- The system shall display the current tracking information about the order The system notifies seller about delivery of product to the consumer.

### **3.2.3 Allow multiple payment methods -**

- The system shall display available payment methods for payment.
- The system shall allow user to select the payment method for order

### **3.2.4 Provide Customer Support. -**

- The system shall provide online help, FAQ's customer support, and sitemap options for customer support.
- The system shall allow user to select the support type he wants.
- The system shall allow user to enter the customer and product information for the support.
- The system shall display user contact of seller and a support desk
- The system shall display the online help upon request.
- The system shall display the FAQ's upon request.

## **3.3. Non-Functional Requirements**

### **3.3.1 Performance:**

- The product shall be based on web and has to be run from a web server.
- The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.
- The performance shall depend upon hardware components of the client/customer.

### **3.3.2 Security:**

#### **3.3.2.1 Data Transfer -**

- The system shall automatically log out all customers after a period of inactivity. The system shall confirm all transactions with the customer's web browser.
- The system shall not leave any cookies on the customer's computer containing the user's password or confidential information.

#### **3.3.2.2 Data Storage -**

- The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.
- The customer's web browser shall never display a customer's credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.
- The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.
- The system's back-end servers shall only be accessible to authenticated administrators.
- The system's back-end databases shall be encrypted and within company's perimeter.

### **3.3.3 Reliability:**

- The system provides storage of all databases on redundant computers with automatic switchover.
- The reliability of the overall program depends on the reliability of the separate components.
- The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes.

#### **3.3.4 Safety:**

- It is the state of being "safe", the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered non-desirable.
- This can take the form of being protected from the event or from exposure to something that causes health or economical losses.
- It can include protection of people or of possessions.

#### **3.3.5 Maintainability**

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- A commercial database is used for maintaining the database and the application server takes care of the site.
- In case of a failure, a re-initialization of the program will be done.
- Also the software design is being done with modularity in mind so that maintainability can be done efficiently

### **3.3 Constraints**

- Limited numbers search queries for the users. Servers incapable of handling high traffic burst The actual product might differ from its display image. Uniform quality of service is not ensured.
- It cannot ensure the reliability of the review.
- The User and Seller must have confirmed User ID and Seller ID respectively.

## **4. Modules**

### **4.1. Customer module**

The main purpose of this module is to provide all the functionality related to customer . It tracks all the information and details of the customer. We have developed all type of CRUD (Create, Read, Update and Delete) operations of the customers. This is a role based module where admin can perform each and every operations on data but the customer will be able to view only his/her data, so access level restrictions has also been implemented on the project.

#### **Features :**

- Admin can add new customers records
- Admin can see the list of customers details
- Only admin can edit and update the record of the customers
- Admin will be able to delete the records of the customers
- All customers forms are validated on client side using JavaScript
- Customer will be able to see his detail.
- Customer will be able to update his details

### **4.2. Product module**

The main purpose for developing this module is to manage the product data wise. So all product will be managed by admin and customer will be able able to see product. Admin can see the list of all the product and filter it according to the customers.

#### **Features:**

- Admin can manage the product
- Admin can edit/delete the product
- Admin can see the list of all product
- Customer can see product

### 4.3. Product Type Module

The main purpose for developing this module is to manage the product type. So all product company will be managed by admin and customer will be able to see the product type.

**Features:**

- Admin can manage the product type
- Admin can edit/delete the product type
- Admin can see the list of all product type
- Customer can see product type

### 4.4. Product Company Module

The main purpose for developing this module is to manage the product company. So all product company will be managed by admin and customer will be able to see the product company.

**Features:**

- Admin can manage the product company
- Admin can edit/delete the product company
- Admin can see the list of all product company
- Customer can see product company

### 4.5 Order Module

The main purpose for developing this module is to manage the customer orders. Order is the main module in this project. DECH which has been developed on Python, Django and MySQL So all orders will be managed by admin and customer will be able to see his order and their payment receipt.

**Features:**

- Admin can manage the order
- Admin can edit/delete the order

- Admin can see the list of all order

#### 4.6 Product Module

The main purpose for developing this module is to manage the items. So all items will be managed by admin and customer will be able to see his order item.

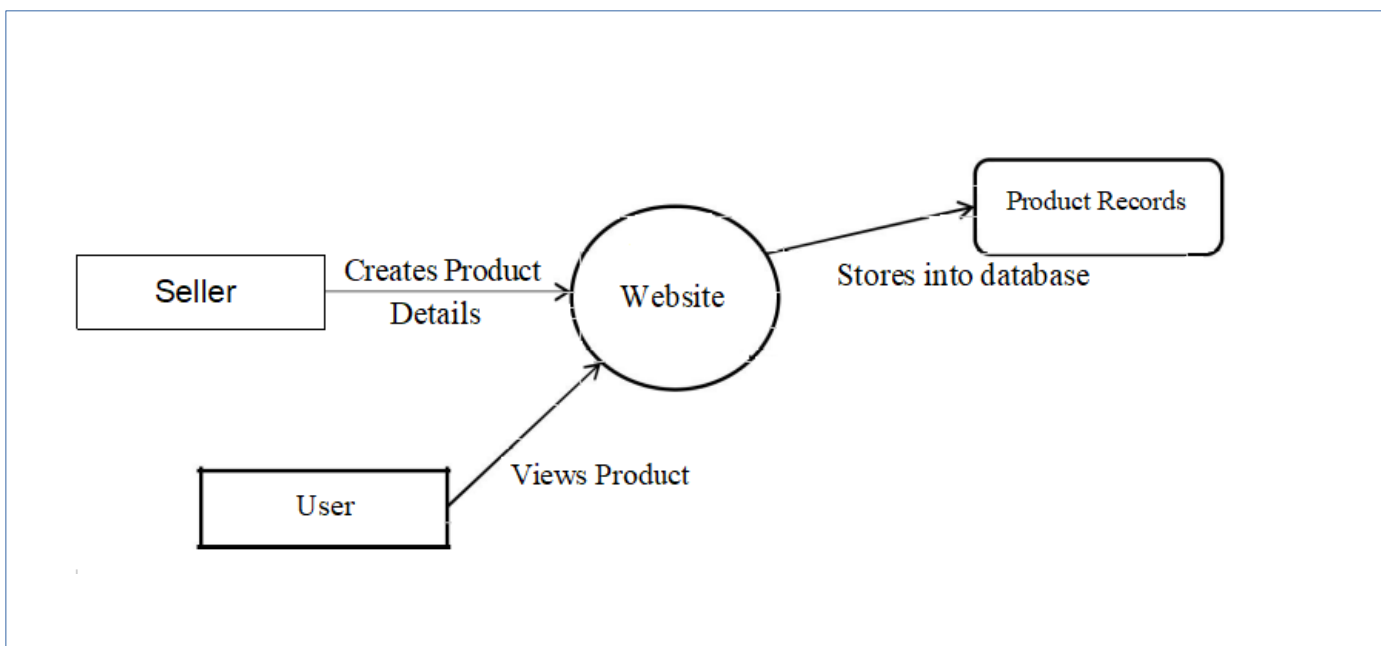
##### Features:

- Admin can manage the items
- Admin can edit/delete the items
- Admin can see the list of all items

### 5. Analysis Model

#### 5.1 Data Flow Diagram

##### 5.1.1. Level 0 DFD



**5.1.2. Level 1 DFD**