

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**SWAMINARAYAN COLLEGE OF ENGG. & TECH.**  
**SAIJ, KALOL**



**A Project Report On**

**(Q-Menu)**

**Of DESIGN ENGINEERING – II A  
(3150001)**

**B.E Semester- V**

**(Computer Engineering)**

**Submitted by:**

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**Academic year**  
(2022-2023)

**SWAMINARAYAN COLLEGE OF ENGG.& TECH.  
(DEGREE), SAIJ, KALOL**



**CERTIFICATE**

This Certificate is awarded to **Mr. Keval Kanubhai Prajapati** From SWAMINARAYAN COLLEGE OF ENGG. & TECH. (DEGREE) Having enrollment no: 211150107520 has completed practical work of “**DESIGN ENGINEERING II A**” during the 5<sup>TH</sup> semester on term (2022-2023).



**INTERNAL GUIDE**  
**Ms. Riya Macwan**

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**Ms. Riya Macwan**

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## ❖ Abstract

In today's scenario most of the Restaurant uses pen-paper system for ordering that is very hepatic as well as troublesome .Also as the world is changing towards digitalization. The restaurant should also digitalize their whole system. That's where our system 'Q-Menu' comes. It provides digital restaurant management system that not only helps in managing the whole customer orders but also provides an online menu that can be open by just scanning the QR code which will be provide physically by the restaurant.

'Q-Menu' not only provides with digital menu but also include functionalities such as ordering food from the app. Additional note for the cook .Calling waiter, menu items can be updated, reports, restaurant table can managed and many more things.

We are the restaurant management company to provide digital menu system to restaurant with customer satisfaction.



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# 1: Introduction

Nowadays every industry is aiming towards digitalization and it is a growing market in India. With this increase in digital the restaurant needs to keep up with technologies for this the perfect and over-all solution is provided by 'Q-menu'. Basically, Q-menu is an online solution system for Restaurant. That helps to digitalize your whole restaurant management system.

Also, as per current situation the government has issued rules for restaurant that include the use of digital menu by restaurant. This is basically the main aim of our system. Digital Menu has many more advantages than physical menu.

For security reason Q-menu has geo-based location system that will not allow random user to order without restaurant consent

## 1.1 Project Definition

- “Q-MENU” is web-based application which provides QR-Code based menu system to restaurants and hotels. Using this system restaurants and hotels can manage their orders and invoices efficiently. The Application will be customer friendly that will assure customers satisfaction and also in an organized manner.

## 1.2 Project description

- Nowadays every industry is aiming towards digitalization and it is a growing market in India. With this increase in digital the restaurant needs to keep up with technologies for this the perfect and over-all solution is provided by 'Q-menu'. Basically, Q-menu is an online solution system for Restaurant. That helps to digitalize your whole restaurant management system.
- Also, as per current situation the government has issued rules for restaurant that include the use of digital menu by restaurant. This is basically the main aim of our system. Digital Menu has many more advantages than physical menu.
- For security reason Q-menu has geo-based location system that will not allow random user to order without restaurant consent.
- Q-menu is divided into 3 Main modules

## 1.3 User Characteristics

- There are three types of users that interact with system, customer, restaurant/café/manager and admin.
- All users can be assumed to have the following characteristics:

- **The Customer**

- User module includes the menu of the restaurant and options for calling waiter or ordering food as well as feedback from Customer side.

- **Manager module**

- This module includes customizing menu items, table occupied, report, customer orders etc.

- **Admin module**

- It will include which restaurant has enrolled in which version of Q-Menu

## 2: Major functionality

- **Manage menu items**

- Restaurant manager can manage food items. He / She can add, update or delete item name price even category.

- **Manage Table number**

- Restaurant manager can add new table, update table names i.e. A1, A2, B1 etc.

- **Manage Order**

- Orders given by the customer are managed automatically as well as manually by manager.

- **Manage Feedback**

- Feedbacks given by customer are stored and can be managed by manager.

- **Manage customer info**

- Our system asks for customer data that can be used for functionalities such as wishing them birth date, anniversary etc.

- **Fake orders prevention**

- Our system has a code base type system that does not allow user to order without consent of Restaurant personal.

## **2.1 Advantages:**

- Easily add or update digital menu.
- Enhance the customer experience.
- Lower cost.
- Convenient & Easy to use.
- Save paper using digital menu.

## **2.2 Limitation:**

- Users must be educated to use our system.
- Users must have Smartphone with camera.
- User needs to be guided if they are not familiar with this kind of system.
- User needs an active internet connection.

### 3: Tools Required

#### Adobe Xd

- **Adobe XD** (also known as **Adobe Experience Design**) is a vector design tool for web and mobile applications, developed and published by Adobe Inc. It is available for macOS and Windows, and there are versions for IOS and Android to help preview the result of work directly on mobile devices. Adobe XD enables website wire framing and creating click-through prototypes.



#### ➤ History

- Adobe first announced they were developing a new interface design and prototyping tool under the name "Project Comet" at the Adobe MAX conference in October 2015, which was a response to the rising popularity of Sketch, a UX and UI design-focused vector editor, released in 2010.
- The first public beta was released for macOS as "Adobe Experience Design CC" to anyone with an Adobe account, on March 14, 2016. A beta of Adobe XD was released for Windows 10 on December 13, 2016. On October 18, 2017, Adobe announced that Adobe XD was out of beta.

#### ➤ Features

- Adobe XD creates user interfaces for mobile and web apps. Many features in XD were previously either hard to use or nonexistent in other Adobe applications like Illustrator or Photoshop.

#### Canva

- **Canva** is an Australian graphic design platform that is used to create social media graphics, presentations, posters, documents and other visual content. The app includes templates for users to use, and the platform is free and offers paid subscriptions such as Canva Pro and Canva for Enterprise for additional functionality. In 2021, Canva launched a video editing tool. Users can also pay for physical products to be printed and shipped. The company has announced it intends to compete with Google and Microsoft in the office software category, with website and whiteboard products.



- In June 2020, Canva raised A\$60 million at a valuation of A\$6 billion; almost doubling its 2019 valuation. In September 2021, Canva raised US\$200 million, with its value peaking that year at US\$40 billion. By September 2022 the valuation of the company had leveled at US\$26 billion.



## ➤ History

- Canva was founded in Perth, Australia, by Melanie Perkins, Cliff Obrecht, and Cameron Adams on 1 January 2013. In its first year, Canva had more than 750,000 users. In April 2014, social media and technology expert Guy Kawasaki joined the company as its chief evangelist (brand promoter). In 2015, *Canva for Work* was launched, focusing marketing materials.
- During the 2016–17 financial year, Canva's revenue increased from A\$6.8 million to A\$23.5 million, with a loss of A\$3.3 million. In 2017, the company reached profitability and had 294,000 paying customers.
- In January 2018, Perkins announced that the company had raised A\$40 million from Sequoia Capital, Blackbird Ventures, and Felicis Ventures, and the company was valued at A\$1 billion.
- During May 2019, the company raised another round of funding of A\$70 million from General Catalyst and Bond and its existing investors Blackbird Ventures and Felicis Ventures, valuing Canva at A\$2.5 billion. In October that year, Canva announced that it had raised an additional A\$85 million at a valuation of A\$3.2 billion, and launched an enterprise product.
- In December 2019, Canva announced *Canva for Education*, a free product for schools and other educational institutions intended to facilitate collaboration between students and teachers.
- In June 2020, Canva announced a partnership with FedEx Office and with Office Depot the following month. As of June 2020, Canva's valuation had risen to A\$6 billion. This valuation grew to A\$40 billion in September 2021, with co-founders Perkins and Obrecht announcing their plan to give away much of their fortune to numerous philanthropic causes.

## ➤ Acquisitions

- In 2018, the company acquired presentations startup Zeetings for an undisclosed amount, as part of its expansion into the presentations space.

- In May 2019, the company announced the acquisitions of Pixabay and Pexels, two free stock photography sites based in Germany, which enabled Canva users to access their photos for designs.
- In February 2021, Canva acquired Austrian startup Kaleido.ai and the Czech-based Smartmockups.

## Xampp

- **XAMPP** is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.
- XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage that common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami.



### ➤ Prerequisites

- XAMPP requires only one zip, tar, 7z, or exe file to be downloaded and run, and little or no configuration of the various components that make up the web server is required. The Windows version of XAMPP requires Microsoft Visual C++ 2017 Redistributable.

### ➤ Features

- XAMPP is regularly updated to the latest releases of Apache, MariaDB, PHP and Perl. It also comes with a number of other modules, including OpenSSL, phpMyAdmin, MediaWiki, Joomla, WordPress and more. Self-contained, multiple instances of XAMPP can exist on a single computer, and any given instance can be copied from one computer to another. XAMPP is offered in both a full and a standard version (Smaller version).

## ➤ Usage

- The most obvious characteristic of XAMPP is the ease at which a WAMP webserver stack can be deployed and instantiated. Later, some common packaged applications that could be easily installed were provided by Bitnami.
- Officially, XAMPP's designers intended it for use only as a development tool, to allow website designers and programmers to test their work on their own computers without any access to the Internet. To make this as easy as possible, many important security features are disabled by default. XAMPP has the ability to serve web pages on the World Wide Web. A special tool is provided to password-protect the most important parts of the package.
- XAMPP also provides support for creating and manipulating databases in MariaDB and SQLite, among others.
- Once XAMPP is installed, it is possible to treat a local host like a remote host by connecting using an FTP client. Using a program like FileZilla has many advantages when installing a content management system (CMS) like Joomla or WordPress. It is also possible to connect to localhost via FTP with an HTML editor.

## VS Code

- **Visual Studio Code**, also commonly referred to as **VS Code**, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.
- In the Stack Overflow 2021 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool among 82,000 respondents, with 70% reporting that they use it.



## ➤ History

- Visual Studio Code was first announced on April 29, 2015, by Microsoft at the 2015 Build conference. A preview build was released shortly thereafter.

- On November 18, 2015, the source of Visual Studio Code was released under the MIT License, and made available on GitHub. Extension support was also announced.<sup>[13]</sup> On April 14, 2016, Visual Studio Code graduated from the public preview stage and was released to the Web.<sup>[14]</sup> Microsoft has released most of Visual Studio Code's source code on GitHub under the permissive MIT License, while the releases by Microsoft are proprietary freeware

## ➤ Features

- Visual Studio Code is a source-code editor that can be used with a variety of Programming Languages, including Java, JavaScript, Go, Node.js, Python, C++, C, Rust and Fortran. It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services).
- Out of the box, Visual Studio Code includes basic support for most common programming languages. This basic support includes syntax highlighting, bracket matching, code folding, and configurable snippets. Visual Studio Code also ships with IntelliSense for JavaScript, TypeScript, JSON, CSS, and HTML, as well as debugging support for Node.js. Support for additional languages can be provided by freely available extensions on the VS Code Marketplace.
- Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports many programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the command palette.
- Visual Studio Code can be extended via extensions, available through a central repository. This includes additions to the editor and language support. A notable feature is the ability to create extensions that add support for new languages, themes, debuggers, time travel debuggers, perform static code analysis, and add code linters using the Language Server Protocol.
- Source control is a built-in feature of Visual Studio Code. It has a dedicated tab inside of the menu bar where users can access version control settings and view changes made to the current project. To use the feature, Visual Studio Code must be linked to any supported version control system (Git, Apache Subversion, Perforce, etc.). This allows users to create repositories as well as to make push and pull requests directly from the Visual Studio Code program.
- Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development. Code can be synced between the editor and the server, without downloading any extra software.
- Visual Studio Code allows users to set the code page in which the active document is saved, the newline character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language.

- Visual Studio Code collects usage data and sends it to Microsoft, although this can be disabled. Due to the open-source nature of the application, the telemetry code is accessible to the public, who can see exactly what is collected.
- VSCode provides binary releases of VS Code without MS branding/telemetry/licensing. VSCode is a community-driven, freely-licensed binary distribution of Microsoft's editor VS Code minus the proprietary opaque code and Microsoft's telemetry. These binaries are licensed under the MIT license.

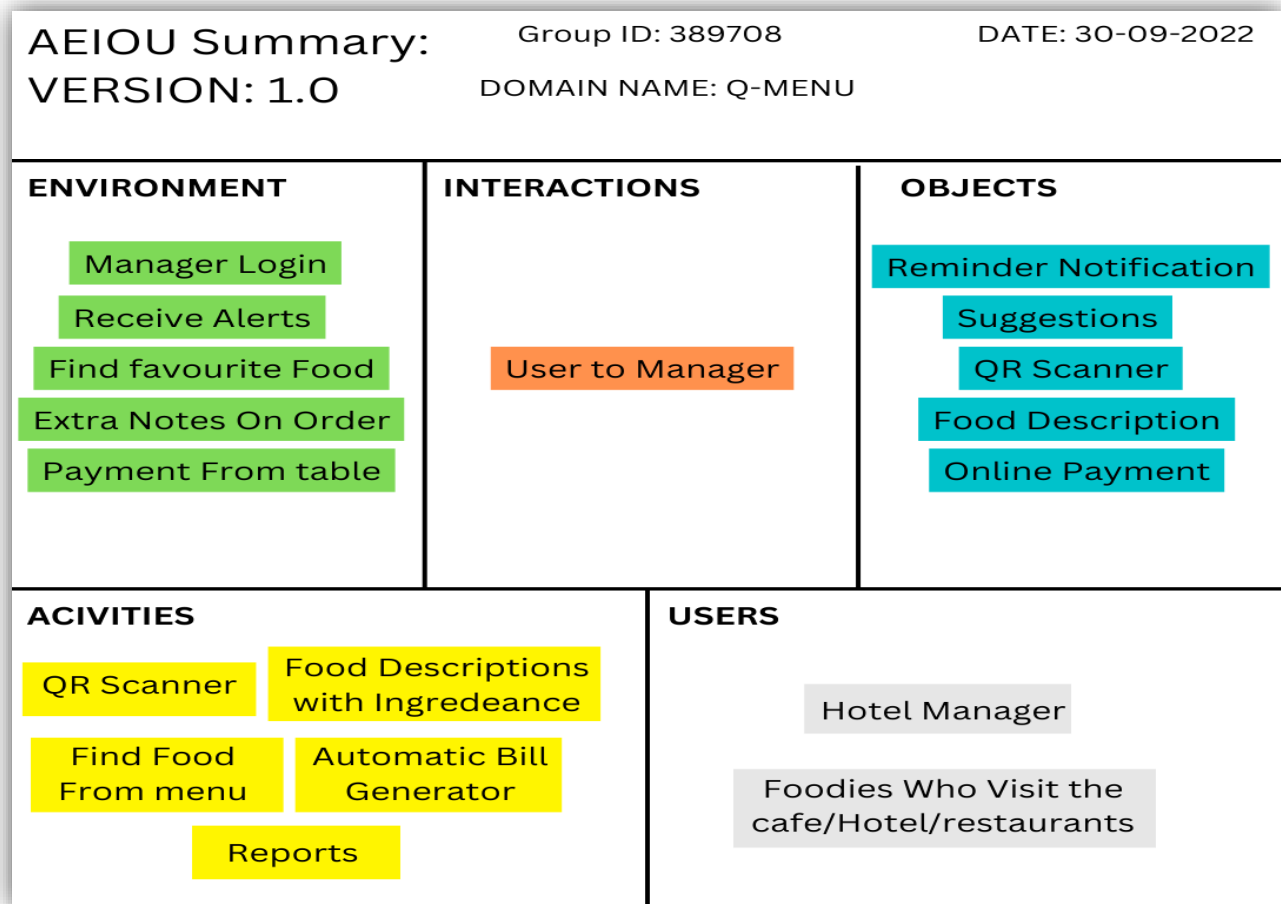
### ➤ **Reception**

- In the 2016 Developers Survey of Stack Overflow, Visual Studio Code ranked No. 13 among the top popular development tools, with only 7% of the 47,000 respondents using it. Two years later, however, Visual Studio Code achieved the No. 1 spot, with 35% of the 75,000 respondents using it. In the 2019 Developers Survey, Visual Studio Code was also ranked No. 1, with 50% of the 87,000 respondents using it. In the 2021 Developers Survey, Visual Studio Code continues to be ranked No. 1, with 70% of the 82,000 respondents using it, rising to 74.48% of the 71,010 responses in the 2022 survey.

## 4: AEIOU Canvas

**AEIOU** is a heuristic to help interpret observations gathered by ethnographic practice in industry. Its two primary functions are to code data, and to develop building blocks of models that will ultimately address the objectives and issues of client.

- **A** - Activity
- **E** - Environment
- **I** - Interaction
- **O** - Object
- **U** – Users



*Figure 4.1: AEIOU*

#### **4.1: Activity**

- QR Scanning to see online menu
- Food descriptions with ingredients to know more about food
- Find food from menu or searching food from menu
- Automatic Bill Generator
- Reports

#### **4.2: Environment**

- Manager Login
- Receive alert about food or review
- Find favorite food by searching
- Extra notes on order
- Payment from table

#### **4.3: Interaction**

- User to café/ hotel/ restaurant manager

#### **4.4: Objective**

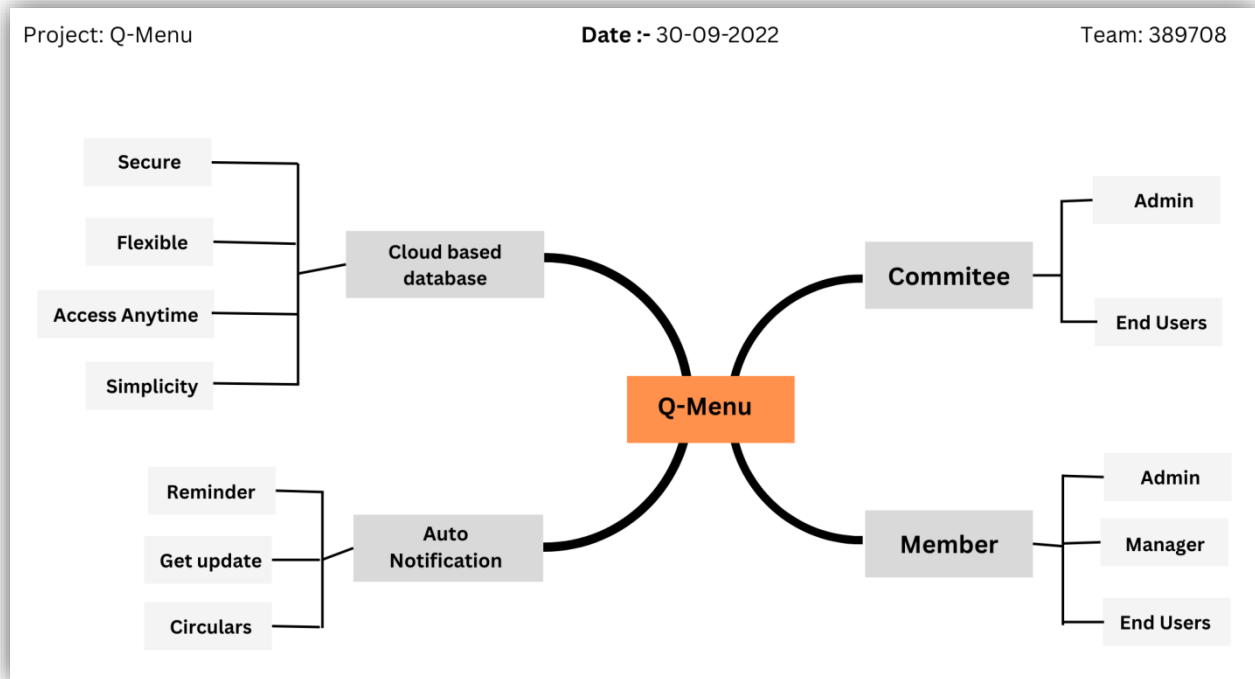
- Reminder Notification
- Suggestions
- QR Scanner
- Food description
- Online Payment

#### **4.5: User**

- Hotel Manager
- Foodies who visit hotel/ café/ restaurant

## 5: Mind Map Canvas

**Mind map** is to present all the topics or points in the form of diagram, drawing or any other form. Through this mind mapping canvas our intention will be clear about our topic and what we have to do. Mind mapping canvas is for easy understanding of to domain.



*Figure 5.1: MIND MAP*

### 5.1: Cloud based databases

- Secure to use
- Flexible to use
- Access anytime from anywhere
- Simplicity

### 5.2: Committee

- Admin who created this service
- End Users who uses the service like café or a customer

### 5.3: Auto Notification

- Reminder about stock of food
- Get Update about new food
- Circulars

### 5.5: Member

- Admin who created this service
- Manager who is owner of hotel/café/restaurant
- End Users who using the Q menu service



## 6: Empathy Canvas

Our domain is VENDOR login portal we started. In this canvas we have include an own experiences we have included our experiences while workout in Cyber Space and has written story on the basic of it. We have focused on our staff guideline & supplement.

Design For: Q-Menu Date: 30-09-2022		Design By: 389708 Version: 1.0	
<b>USER</b> <div>Developer</div> <div>Customer</div> <div>Admin</div>		<b>STACKHOLDERS</b> <div>Restaurant</div> <div>Cook</div> <div>Servent</div> <div>Receptionist</div>	
<b>ACTIVITES</b> <div>Qr-code Scanning</div> <div>Item selecting</div> <div>Generating bill</div> <div>Checking Menu</div> <div>Paying bill</div>			
<b>STORY BORDING</b> <b>HAPPY</b> <p>The customer name anjali she is doing job in it company in bangalore because of deadline she does not want to waste his time she heard in office about a one restaurant that uses a digital manu so she went to the restaurant and order food in just a few minute she is happy about that she can't to wait for waiter to get a order and after that cook make for his item.</p>			
<b>HAPPY</b> <p>Today is rahul's birthday he went to the popular restaurant around their area with his friends for his birthday party while ordering a food he saw a helpful feature is given in a Q-Menu that he can track live total of their bill so he can order food in his budget.</p>			
<b>SAD</b> <p>The customer called john today it's birthday so he is very excited to try new restaurant that recently open in his city he heard lot of time about their online bill and menu system so he went to the restaurant while ordering a food due to lack of network issues from customer side or from server side at that time john can not order a food.</p>			
<b>SAD</b> <p>The old uncle like to try new restaurant around his house he heard about the new restaurant around their area so one dey he went to the restaurant he search for table and find one empty after reaching a table he saw a qr-code scanner because the uncle don't use android/ios phone so he can't order a food due to lack of digitalization and online bill payment.</p>			

*Figure 6.1: EMPATHY*

### 6.1: User

- Developer Who Created this website
- Admin who is café/ restaurant/ hotel owner
- Customer who uses our service to see online Q-menu

## 6.2: Stack holders

- Restaurant
- Cook
- Servant
- Receptionist

## 6.3: Activities

- QR-Code Scanning while ordering food
- Item Selecting while ordering food
- Checking menu
- Paying Bill
- Generating Bill

## 6.4: Story Boarding

### HAPPY

- The customer name anjali she is doing job in it company in bangalore because of deadline she does not want to waste his time she heard in office about a one restaurant that uses a digital manu so she went to the restaurant and order food in just a few minute she is happy about that she can't to wait for waiter to get a order and after that cook make for his item.

### HAPPY

- Today is rahul's birthday he went to the popular restaurant around their area with his friends for his birthday party while ordering a food he saw a helpful feature is given in a Q-Menu that he can track live total of their bill so he can order food in his budget.

### SAD

- The customer called john today it's birthday so he is very excited to try new restaurant that recently open in his city he heard lot of time about their online bill and menu system so he went to the restaurant while ordering a food due to lack of network issues from customer side or from server side at that time john cannot order a food.

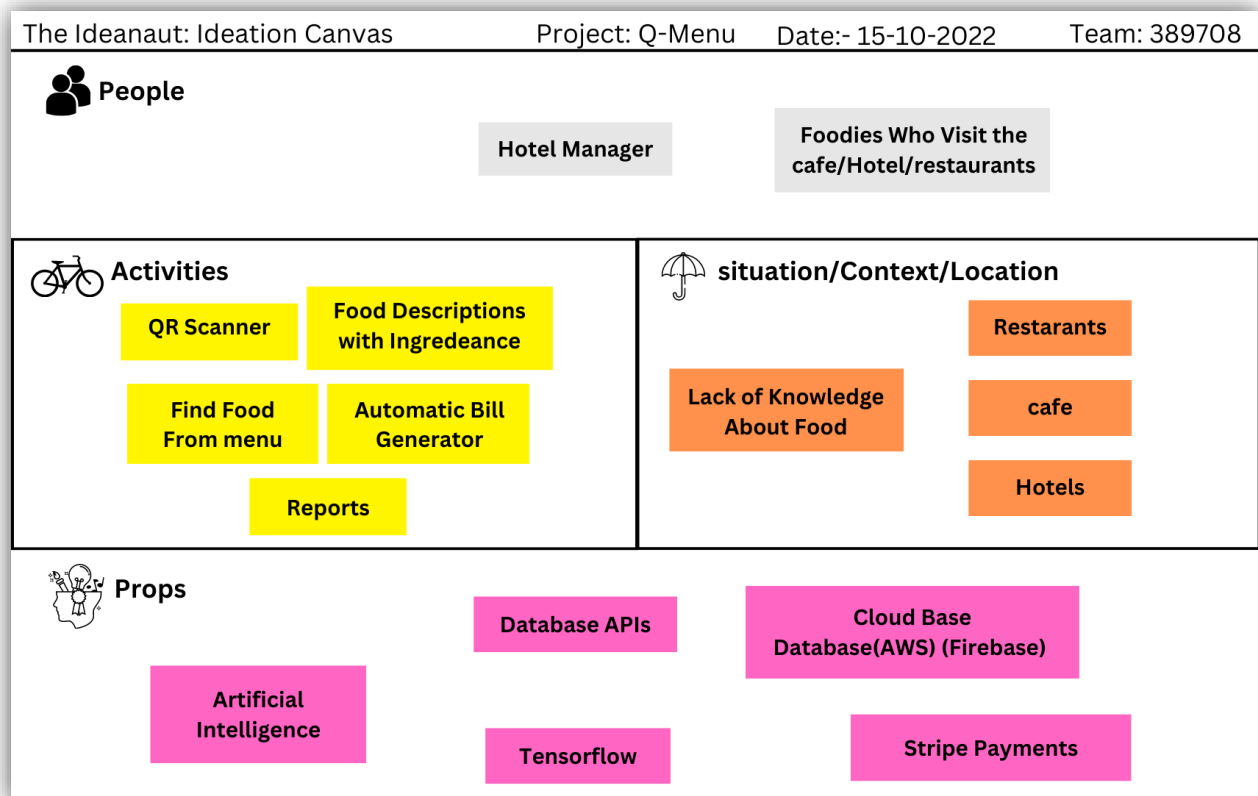
### SAD

- The old uncle like to try new restaurant around his house he heard about the new restaurant around their area so one dey he went to the restaurant he search for table and find one empty after reaching a table he saw a qr-code scanner because the uncle don't use android/ios phone so he can't order a food due to lack of digitalization and online bill payment.

## 7: Ideation Canvas

Pin down distinct people you can think of or you are interested to solve problems for. You can segment them as much as possible on basis of by parameters. Create multiple segments to enable extended boundaries to your idea. This section answers to “WHO” centered questions coming across any problem.

- Who may be various set of people benefited by your idea?
- Who may be the various stakeholders to your concept?
- Who might use your product?
- Who might invest in your product?



*Figure 7.1: IDEATION*

### 7.1: People

- Hotel Manager
- Foodies who visit Hotel/ Restaurant/ Cafe

## 7.2: Activities

- QR Scanner
- Food Descriptions with ingredeance
- Find food from menu
- Automatic bill generator
- Reports

## 7.3: Situation/Context/Location

- Lack of knowledge about food
- Restaurant around your area
- Café around your area
- Hotels around your area

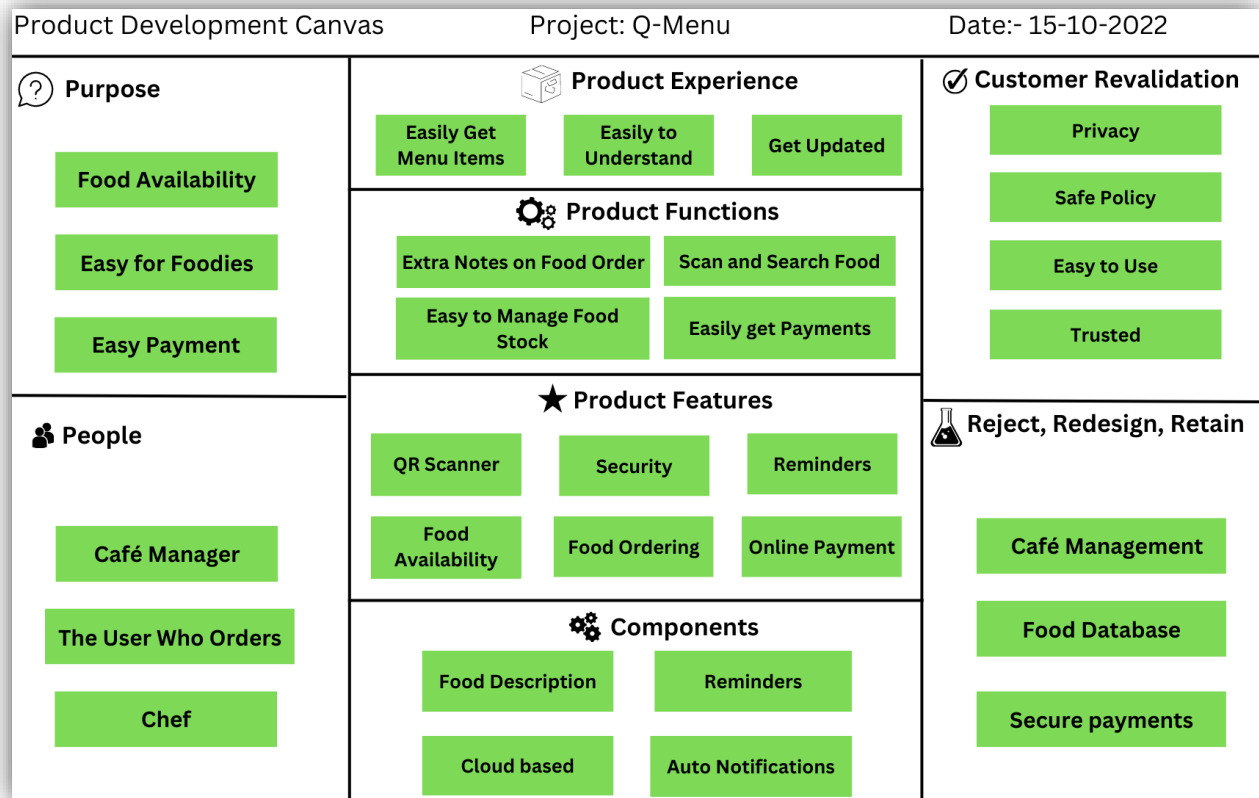
## 7.4: Props

- Artificial intelligence
- Database API
- Tensor flow
- Cloud base database(AWS)
- Stripe payments

## 8: Product Development Canvas

Once, and idea is generated, next step is to identify a product/process (in a comprehensive manner) to resolve the specific difficulty for a user/user group. The PDC consist of the various sections as User, Purpose, Experience (User Fee i.e., User's feelings, expectations, and experience from the developed product-imagine/visualize this), Functions, Features, Components and validation/re-validation.

Product canvas is a simple but powerful tool that helps you create a product with a great user experience and the right features.



**Figure 8.1: PRODUCT DEVELOPMENT**

### 8.1: Purpose

- To check live Food availability
- Easy for foodies to see food or order food
- Easy payment because of live total

### 8.2: Product Experience

- Easily get menu item
- Easy to understand

- Get updated about food

### **8.3: Customer Revalidation**

- Privacy about your personal data
- Safe Policy
- Easy to use from scanning the QR to order a food to paying bill
- Trusted

### **8.4: People**

- Café manager
- Customer who order food with the help of Q menu
- Chef who working in a cafe

### **8.5: Product Functions**

- Extra notes on food order
- Scan and search food
- Easy to manage food stock
- Easily get payments

### **8.6: Product Features**

- QR scanner
- Security
- Reminders
- Food availability
- Food ordering
- Online Payment

### **8.7: Components**

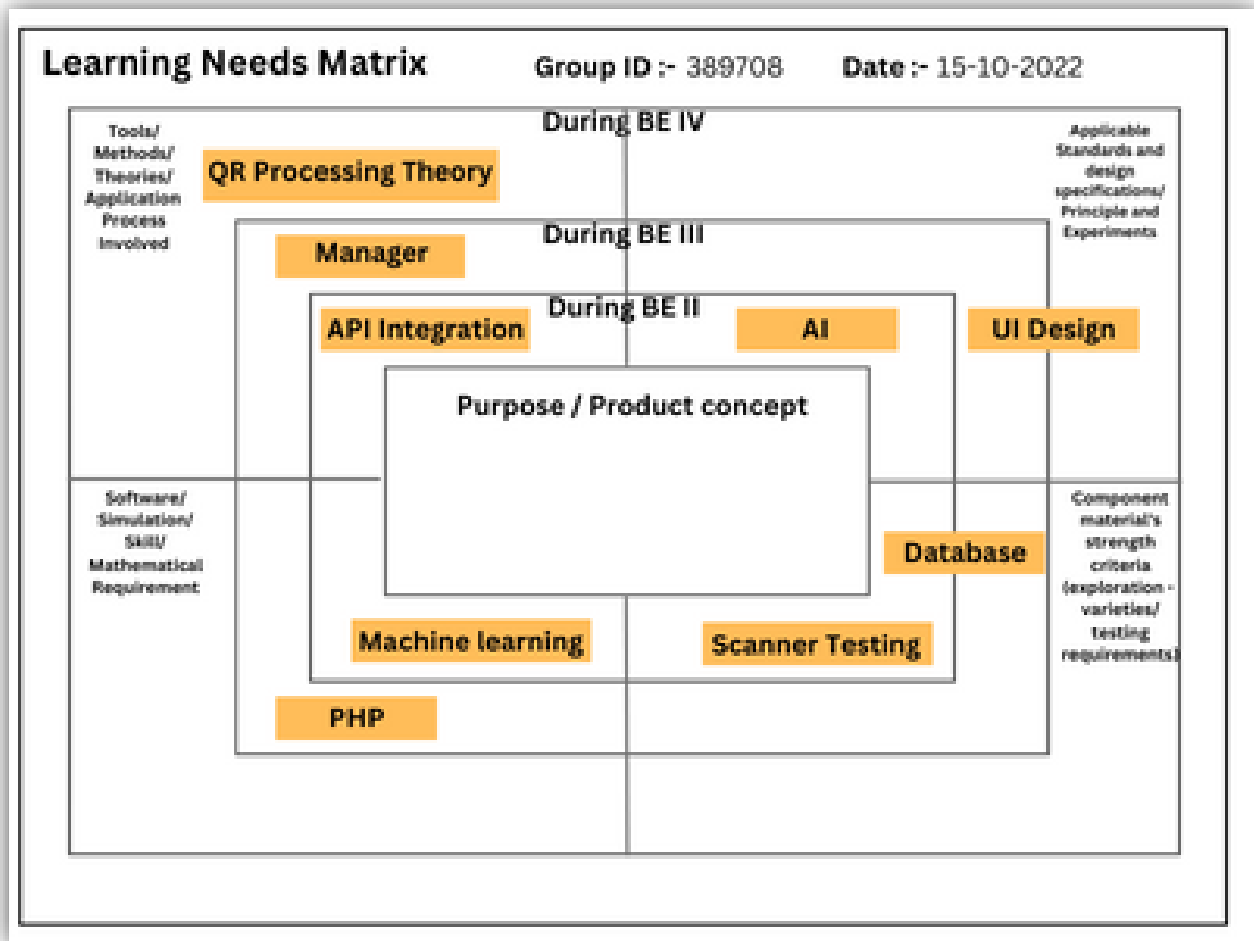
- Food description
- Reminders
- Cloud based
- Auto notification

### **8.8: Reject, Redesign, Retain**

- Café management
- Food database
- Secure payment

## 9: Learning Need Matrix (LNM)

- o LNM canvas (LN Matrix) full form is the **Learning Needs Matrix** Canvas will help the student to identify the learning requirement at an early stage along with prioritization/time allocation for each learning priority



*Figure 9.1: LNM*

## 10: Prototype

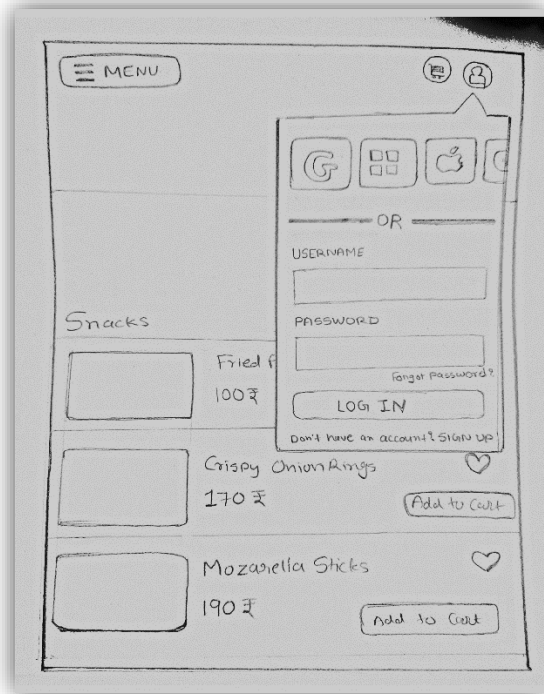


Figure 10.1: Login Form

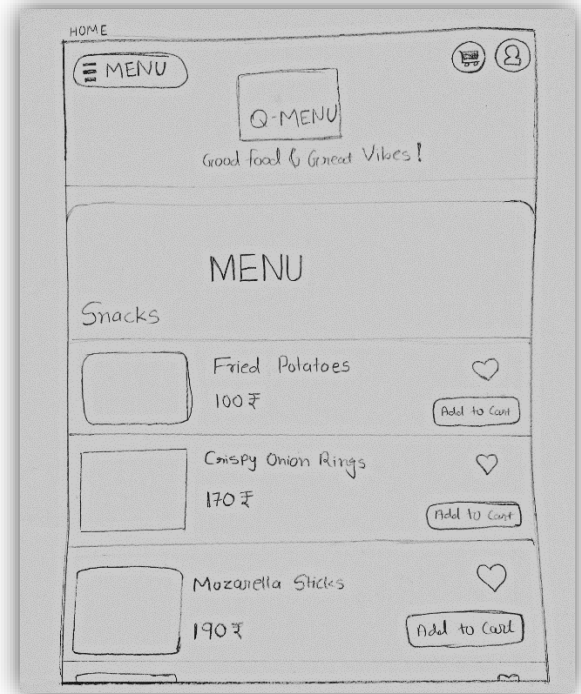


Figure 10.2: Home

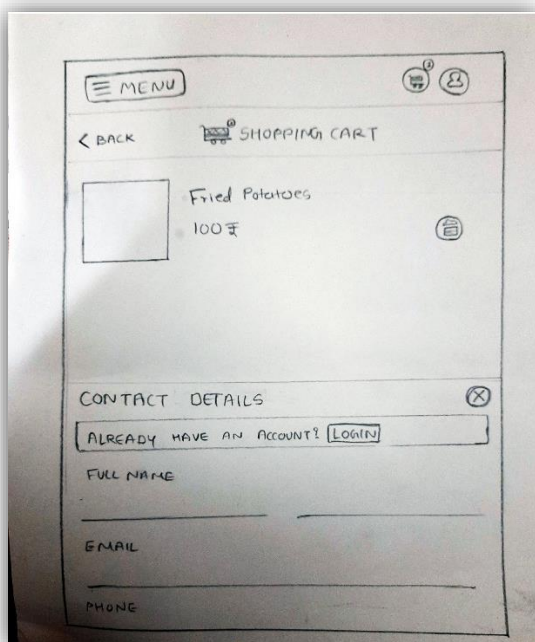


Figure 10.3: Cart Page With Form

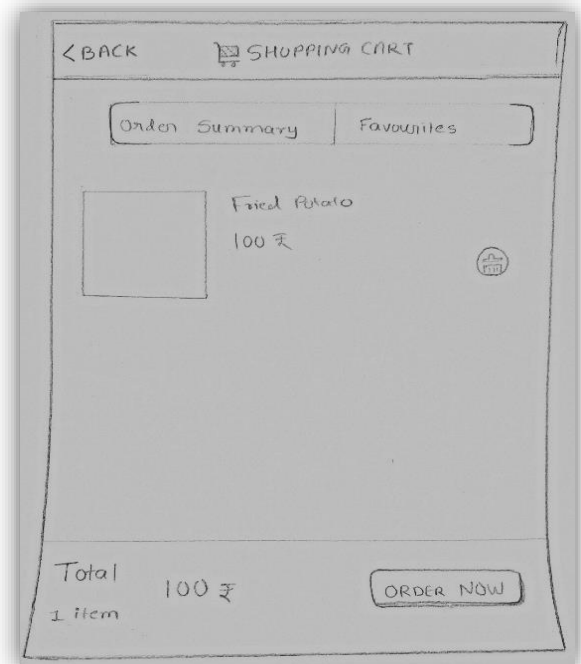
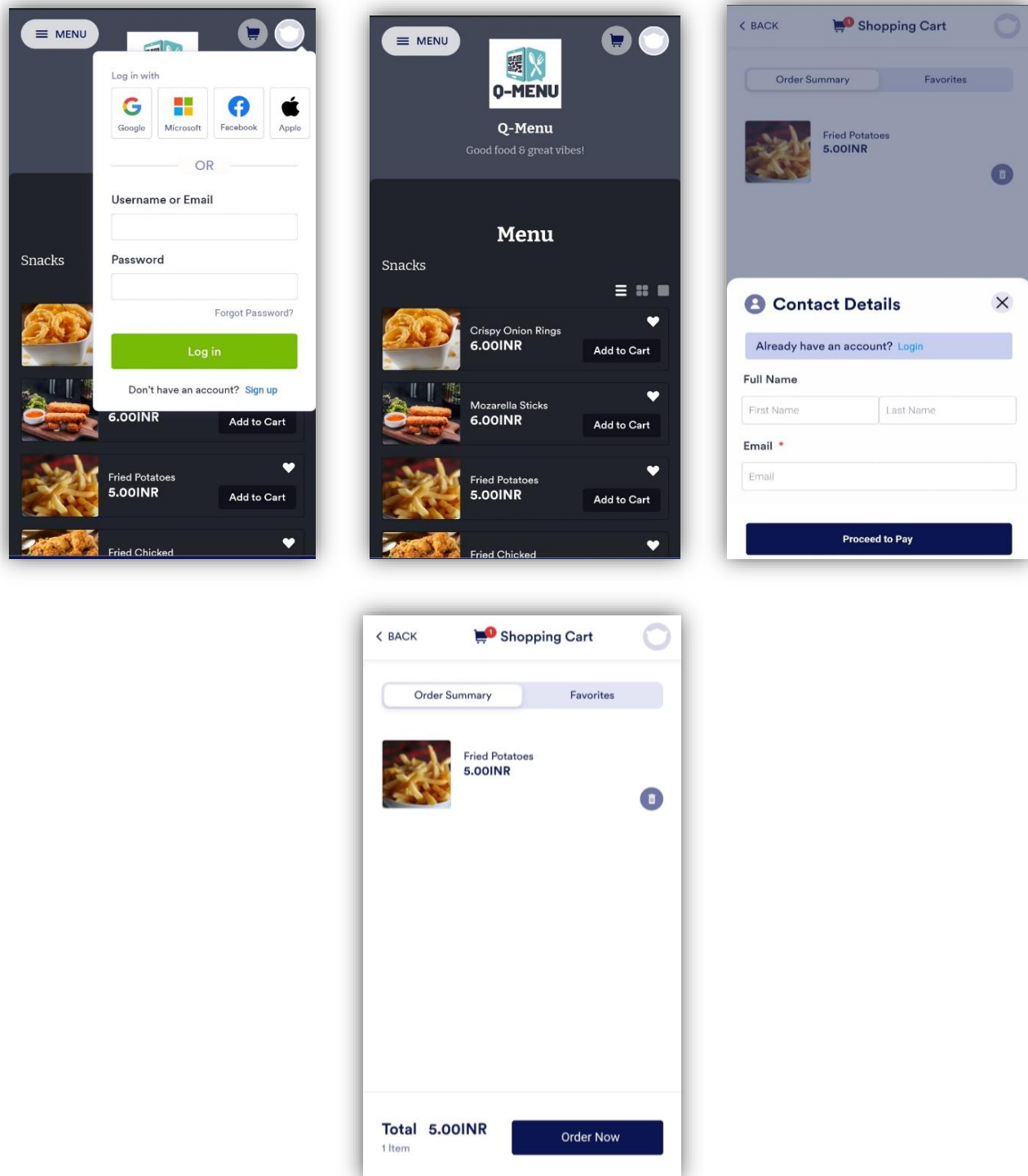


Figure 10.4: Order Page With Total





*Figure 10.5: Live Design*

## 11: Conclusion & Future work

### Conclusion

- This Project helped us to understand whole restaurant management system.
- And also this project helped us to understand whole new concept how we can use QR-Code in real time.
- We learned how to make responsive website.
- We learn new web-technologies like HTML, CSS, Advance JavaScript, AJAX, PHP, JSON.

### Future Work

- In Future We Want to add booking table online feature in our system.
- Add online payment for order.
- Swiggy, Zamato & Uber Eats Order module that display order of that apps.

## 12: Bibliography

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- ❖ Chen, Rongjun; Yu, Yongxing; Xu, Xiansheng; Wang, Leijun; Zhao, Huimin; Tan, Hong-Zhou (11 December 2019). ["Adaptive Binarization of QR Code Images for Fast Automatic Sorting in Warehouse Systems"](#). *Sensors*. **19** (24): 5466. Bibcode:[2019Senso..19.5466C](#). doi:[10.3390/s19245466](#). PMC [6960674](#). PMID [31835866](#).
- ❖ ["Exclusive - CHINA: Pernod Ricard to use QR codes on all China packaging"](#). *www.just-drinks.com*. 17 September 2013. Retrieved 24 April 2020.
- ❖ Li, Tongzhe; Messer, Kent D.; Li, Tongzhe; Messer, Kent D. (2019). Li, Tongzhe; Messer, Kent D. (eds.). ["To Scan or Not to Scan: The Question of Consumer Behavior and QR Codes on Food Packages"](#). *Journal of Agricultural and Resource Economics*. doi:[10.22004/ag.econ.287977](#). ISSN [1068-5502](#)
- ❖ ["QR Code Readers for iPhone, Android, Blackberry and Windows Phone 7"](#). 7 December 2010. [Archived](#) from the original on 25 August 2011
- ❖ Jenny Lee (4 January 2012). ["Tesco's cool QR code advertising campaign"](#). [Archived](#) from the original on 3 June 2016. Retrieved 26 May 2016..

# APPENDICES



# GUJARAT TECHNOLOGICAL UNIVERSITY

*Centre for Industrial Design (Open Design School)*

## DESIGN ENGINEERING

### CONTINUOUS ASSESSMENT CARD

COLLEGE NAME: SWAMINARAYAN COLLEGE OF ENGG.& TECH. SAIJ, KALOL	
COLLEGE CODE: 115	
SUBJECT NAME: Design Engineering	
SUBJECT CODE: 3150001	SEMESTER: 2A
BRANCH: Computer Engineering	ACADEMIC YEAR: 2022-2023

TEAM NAME:		TEAM ID: 389708
PROJECT TITLE/DOMAIN: Q-Menu		
SR. NO.	TEAM MEMBER'S NAME	ENROLLMENT NO.
01	Keval Kanubhai Prajapati	211150107520
02	Himanshu Anilkumar Suthar	211150107514
03	Ekta Vishnubhai Gajjar	211150107507
04	Anjali Vijaybhai Soni	211150107509
INTERNAL GUIDE NAME: Ms. Riya Macwan		
INTERNAL GUIDE SIGN:		

**Head of Department**  
Ms. Riya Macwan

College Seal

**MONTHLY ASSESMENT – 1(Observation, Empathy and Define Phase)**  
**(DATE :30/09/2022)**

1. Why students/team have taken above mentioned domain? (Please specify the reason) (Note: For more content or information, one may attach additional pages to this card.)

---

Our team choose Q-menu as domain because it is important to identify project data what is the project about is clearly justifying by this domain.

---

2. How frequently student team has gone for observation on field, mention with date, place, time etc.? Which are the key observations that they have noticed?

---

The team has visited too many café and restaurants like they visited to the coffee culture at Rajpath Ragoli Road, Ahemdabad, café Bistro at sola bhagvat, Ahemdabad Danny's café near sindhubhavan road, etc.

---

3. A. How many interactions/interviews team members have done?

---

The team met too many people who is connected with the food industries. As we mentioned we visited the places and we have interactions with managers of that place as well as owner of few of them

---

- B. Who are the user and various stakeholders on domain? Describe their persona (Name,age, occupation/education, roles and responsibility etc.)

---

In this domain users are(Restaurant, cook, Servant, Receptionist) and stakeholders

---

C. List out the questions asked by team while having observation and interview?

- 
1. Which payment gateway we can implement on this project?
  2. Which designing platform will help us?
  3. Which functionalities we can implement to enhance this project?
- 

4. What is something special/random/unusual (i.e. activity, environment, interaction, object or user) team have observed at the domain? Please elaborate the conditions with photographs if available.

---

**Environment::** Admin login, Manager login, manage order

---

**Activity:** Scanning Qr, taking order, giving order, paying bill online or offline, checking menu items, selecting menu items, generating bills.

---

**Object:** Quick notification of succeeding order, Ordering, Menu and items, Feedback

---

**User:** Customer, manager, developer

---

- 
5. Enlist any five major problems observed by your team in the respective domain. Mention any one for which you have empathize user the most and which might become your problem statement. Give reasons of selection of particular problem/issue based on empathy.

---

After building our application there we found one major problem, we found that some people don't use smartphone so they can't use our Q-Men application.

---

- 
6. Define your "PROBLEM DEFINITION" for the project as per below format. Which might be refine till end of Ideation phase if you wish.



**SUGESTIONS BY INTERNAL GUIDE:**

AEIOU CANVAS SUGGESTIONS:

EMPATHY CANVAS SUGGESTIONS:

MIND MAPPING SUGGESTIONS:

GENERAL SUGESTIONS:

Overall Mark (Out of 05):

**GUIDE SIGNATURE:**

**Date:**



**MONTHLY ASSESSMENT – II (Ideation and Product Development Phase)**  
**(DATE :31/10/2022)**

1. Explain briefly Ideation thought process and efforts of your team to reach ideas for listed problems.

---

The team actually visited the places, which we already having QR-Menu. They have discuss with staff members and gather experiences, feedbacks and issues phased by staff members as well as the customer who might not having that much technical knowledge.

---

2. Enlist any five effective ideas to address the probable listed problems with reason.

---

For not-technical people we can hire one person who can guide them.

---

For staff members who can't get how to use system we can provide 1 month training

---

For the people who are not using smart phone all the café or restaurant have basic staff they will order behalf of them

---

3. Explain the most effective possible solution proposed for the problem.

---

The manages will hire one person who can help is the most effective possible solution.

---

4. Explain the features, functions and working principles/ technology/ pattern of your proposed solution.

---

**Features :** Digitalization, Bill payment without the need to paper print

---

**Working principles :** Save time, people will have total bill before order

---

**Technologies :** Qr-code scanner, php, html, css, java script

---

5. Enlist major advantages and disadvantages (at least three) of the proposed solution.

**Advantages:**

☐ No use of paper/plastic because it is a online

☐ No waste of extra time

☐ Updated Menu

**Disadvantages:**

☐ Network issue

☐ Virus attacks

☐ Server problem

6. Briefly mention refinement on PDC based on User/Stakeholder's feedback on your concept.

By the feedback of users we decided that the which our portal have added some other feature and we can provide a good application to users.

**SUGGESTIONS BY GUIDE:**

IDEATION CANVAS SUGGESTIONS:

PRODUCT DEVELOPMENT CANVAS SUGGESTIONS:

LEARNING NEEDS MATRIX SUGGESTIONS (in case of 5<sup>th</sup> sem and onwards):

GENERAL SUGGESTIONS:

Overall Mark, considering assessment I (Out of 05):

**GUIDE SIGNATURE:**

**Date:**

**MONTHLY ASSESSMENT -III (Detail Design, Prototype and Test phase)(This assessment shall be done by another guide of department or interdepartmentally along with guide)(DATE :25/10/2022)**

1. Which theoretical subjects/concepts are involved with your project? How it is useful to your project?

Comparison specification and comparison of price both are essential part of our application.  
Casually both are used to access come virtual data and come specify history.

2. Which software/design tool/Skills you have learned/applied during the project? Explain the features of it.

We have learn canva as designing tool, Adobe XD as UI/UXD development tool and have suffer design UI on website and we find the <https://www.jotform.com>

3. Explain the prototype/model prepared by the student/team.

A prototype is an basically a ui that you see while opening a particular website. In our prototype we upload a Menu of a particular restaurant and feedback form for that customer

4. What are the materials, technology, things have utilized to make the prototype/model?

Our team visiting different restaurant and café collect information about their system then we made a prototype. We learned adobe XD software, HTML, CSS and Bootstrap 3 and 4 for designing

5. How many Iterations have you done to reach final solution? Explain modification/revise parameters/characteristics for each iteration.

We have done all most interactions in this project and our modification for future is to make our software more utilize and more accurate.

6. What is the scope of the project? How you are planning to implement it in future?

The scope of our project is depends upon next 7 to 8 years technology as in this area always new technology is better to utilize new software.

**SUGESTIONS BY EVALUATOR:**

PROTOTYPE/MODEL SUGGESTIONS:
GENERAL SUGESTIONS:
Overall Mark, considering assessment I & II (Out of 10):

**Department/Interdepartmental Evaluator name**  
**and sign:**  
**Guide sign:**  
**Date:**

**FINAL ASSESSMENT AT THE END OF SEMESTER**

**EVALUATOR MEMBERS DETAILS:**

NAME	INSTITUTE & DEPARTMENT	SIGN.
1.		
2.		
3.		

**ASSESSMENT SUMMARY:**

CONTINUOUS ASSESSMENT SUMMARY:	MARKS OBTAINED
MONTHLY ASSESSMENT – I	
MONTHLY ASSESSMENT – II	
MONTHLY ASSESSMENT – III	
TOTAL (Out of 20)	
FINAL EVALUATION/VIVA MARKS (Out of 80)	
TOTAL (Out of 100)	
EXAMINER COMMENTS/SUGGESTIONS:	

**DATE:**

**INTERNAL GUIDE SIGN**

**HOD SIGN**

**COLLEGE SEAL**



# GUJARAT TECHNOLOGICAL UNIVERSITY

CERTIFICATE FOR COMPLETION OF ALL ACTIVITIES AT ONLINE DESIGN PORTAL

SUBJECT : DE2A-3150001

B.E. SEMESTER V, ACADEMIC YEAR 2022-2023

Date of certificate generation : 07 December 2022 (22:04:55)

This is to certify that, *prajapati Keval Kanubhai* ( Enrolment Number - 211150107520 ) working on project entitled with *Q-Menu* from *Computer Engineering* department of *SWAMINARAYAN COLLEGE OF ENGINEERING & TECHNOLOGY* had submitted following details at ONLINE OPEN DESIGN SCHOOL PORTAL.

AEIOU & Mind Map Canvas	Completed
Empathy Canvas	Completed
Ideation Canvas	Completed
Product Development Canvas	Completed
Prototype	Completed
Report	Completed

Name of Student : prajapati Keval Kanubhai

Name of Guide : Ms. MACWAN RIYABEN  
NALINKUMAR

Signature of Student : \_\_\_\_\_

\*Signature of Guide : \_\_\_\_\_

**Disclaimer :**

This is a computer generated copy and does not indicate that your data has been evaluated. This is the receipt that GTU has received a copy of the data that you have uploaded and submitted as your project work.

\*Guide has to sign the certificate, Only if all above activities has been Completed.



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CERTIFICATE FOR COMPLETION OF ALL ACTIVITIES AT ONLINE DESIGN PORTAL

SUBJECT : DE2A-3150001

B.E. SEMESTER V, ACADEMIC YEAR 2022-2023

Date of certificate generation : 07 December 2022 (22:11:55)

This is to certify that, **Suthar Himanshu Anilkumar** ( Enrolment Number - 211150107514 ) working on project entitled with **Q-Menu** from **Computer Engineering** department of **SWAMINARAYAN COLLEGE OF ENGINEERING & TECHNOLOGY** had submitted following details at ONLINE OPEN DESIGN SCHOOL PORTAL.

AEIOU & Mind Map Canvas	Completed
Empathy Canvas	Completed
Ideation Canvas	Completed
Product Development Canvas	Completed
Prototype	Completed
Report	Completed

Name of Student : S u t h a r   H i m a n s h u  
Anilkumar

Name of Guide : M s . M A C W A N   R I Y A B E N  
NALINKUMAR

Signature of Student : \_\_\_\_\_

\*Signature of Guide : \_\_\_\_\_

**Disclaimer :**

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CERTIFICATE FOR COMPLETION OF ALL ACTIVITIES AT ONLINE DESIGN PORTAL

SUBJECT : DE2A-3150001

B.E. SEMESTER V, ACADEMIC YEAR 2022-2023

Date of certificate generation : 08 December 2022 (14:42:21)

This is to certify that, **Gajjar Ekta Vishnubhai** ( Enrolment Number - 211150107507 ) working on project entitled with **Q-Menu** from **Computer Engineering** department of **SWAMINARAYAN COLLEGE OF ENGINEERING & TECHNOLOGY** had submitted following details at ONLINE OPEN DESIGN SCHOOL PORTAL.

AEIOU & Mind Map Canvas	Completed
Empathy Canvas	Completed
Ideation Canvas	Completed
Product Development Canvas	Completed
Prototype	Completed
Report	Completed

Name of Student : Gajjar Ekta Vishnubhai

Name of Guide : Ms. MACWAN RIYABEN NALINKUMAR

Signature of Student : \_\_\_\_\_

\*Signature of Guide : \_\_\_\_\_

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CERTIFICATE FOR COMPLETION OF ALL ACTIVITIES AT ONLINE DESIGN PORTAL

SUBJECT : DE2A-3150001

B.E. SEMESTER V, ACADEMIC YEAR 2022-2023

Date of certificate generation : 08 December 2022 (15:41:28)

This is to certify that, *Soni Anjali Vijaybhai* ( Enrolment Number - 211150107509 ) working on project entitled with *Q-Menu* from *Computer Engineering* department of *SWAMINARAYAN COLLEGE OF ENGINEERING & TECHNOLOGY* had submitted following details at ONLINE OPEN DESIGN SCHOOL PORTAL.

AEIOU & Mind Map Canvas	Completed
Empathy Canvas	Completed
Ideation Canvas	Completed
Product Development Canvas	Completed
Prototype	Completed
Report	Completed

Name of Student : Soni Anjali Vijaybhai

Name of Guide : Ms. MACWAN RIYABEN NALINKUMAR

Signature of Student : \_\_\_\_\_

\*Signature of Guide : \_\_\_\_\_

**Disclaimer :**

This is a computer generated copy and does not indicate that your data has been evaluated. This is the receipt that GTU has received a copy of the data that you have uploaded and submitted as your project work.

\*Guide has to sign the certificate, Only if all above activities has been Completed.