

## Atmanirbhar Bharat Application

Kirti Salunkhe, Shradha Koyale, Harshada Deore, Sanchita Joshi

Information Technology  
Bharati Vidyapeeth's College of  
Engineering For Women, Pune, India

**Abstract:** Basic concept of this app is selling and buying Indian products focus on Indian manufacturer products. Other app features like take your business online, search job. This is cloud based Android Application. Used to direct selling and buying between farmers, wholesalers, retailers, and customers allows registering as sellers or buyers .Buy& selling category wise product such as Vegetables, Fruits, flowers etc. posted by farmers, wholesalers & retailers. To improve the business such as Home based, Small scale, medium and large scale business user can register business on this app. In available register business user can apply for job. Buying product online it will help to save time, money, fuel. During this pandemic situation many peoples are prefer online shopping rather than go out for shopping. Use more Indian products as much as possible so we can make India Atmanirbhar.

**Keywords:** Buying and selling products, cloud database, Android app, and shortest path.

### 1. INTRODUCTION:-

Atmanirbhar Bharat app will make small contribution to make India independent and improve our economy. Basic concept of this app is selling and buying Indian product. First feature of this app is direct selling and buying between farmers, wholesalers, retailers, and customers allows registering as sellers or buyers .Buy & selling category wise product such as Vegetables, Fruits, flowers etc. posted by farmers, wholesalers & retailers. Second feature is that help to improve the business such as Home based, small scale, medium and large scale Business. They can register their business in this app for example Home Made cake, Party order, Tiffin service etc. Registered user can directly make contact with business owner and get provided service in easy way. It helps to give global platform to homemade product and improve business. Third feature is that people can search job using this app. At time of new business registration, business runner need to give the information like if they want any employees for their business if they need any employees then how many employees they need all these information we collect and then we used these information for further

job searching process. User can register them and search job in his field. This app also helps Young Entrepreneur to start their own business by providing guidance. If any entrepreneur wants guidance about start new business they can discuss with already registered business owner in this app. Direct marketing involves selling a product from seller directly to buyer, often the seller receive price similar to what the product store charges. This method of marketing is more entrepreneurial or business like than wholesale marketing. The opportunity to interact with growers is one of the reasons consumers like to purchase this way. The experience of the purchase is often part of the product. There are so many sellers around you selling authentic, quality homemade products & service at very reasonable price from their homes. With Atmanirbhar Bharat App you can contact such sellers & easily purchase homemade products & services online nearby your locality .Project domain is cloud based Android Application. We are using android studio IDE for developing our app. Android Studio is the official Integrated Development Environment (IDE) for Android app development, based on IntelliJ IDEA and it provides extensive tools to help you test your Android apps with JUnit 4 and functional UI test frameworks. For backend, data storage we are using firebase database The Firebase Real-time Database is a cloud-hosted database. Data is stored as JSON and synchronized in real-time to every connected client. Firebase offers a free-tier billing plan for all its products. For high levels of use, it provides a paid-tier billing plan. We are using free-tire billing in our project. Security and data validation are available through the Firebase Real-time Database Security Rules, expression- based rules that are executed when data is read or written. In our project, we are using two algorithms shortest path algorithm and quick sort algorithm. The shortest path problem is an approach towards finding the shortest and quickest path or route from a starting point to a final destination. Using this algorithm we are calculating distance between two nodes or places destination calculated using Google maps. Second one is Quick sort algorithm. It is Divide Conquer based algorithm and the fastest sorting algorithm. In our project, this algorithm used for sorting a products price wise so user get better experience. The purpose of this project is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to consumers. Also, we shall predict and sort out how we hope this product will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document.

## 2. LITERATURE SURVEY

Tri Pujadi et al. [2] proposed the modelling of E-Commerce Supply Chains Mobile Application. This research is to design a Supply Chain Management application based on mobile devices as an intermediary between farmers, producers, and consumers. In existing system user can buy Indian products online but not sell their products. In proposed system providing the facility of buy and sell products online in a single application.

Rathnayake, W. G. R. P. S. et al. [3] discussed on Google Maps Based Travel Planning & Analyzing

System (TPAS). This research proposes an interactive trip organizing service with enhanced travel information services and travel recommendations. This system is capable of proposing a positive or negative score to a specified travel plan by analyzing weather conditions and distances. The System can analyze user inputs and generate shortest path covering all the travel destinations and generate the travel plan including the route.

Smita Dubey et. al. [1] proposed the buying Indian products helps to grow the economy of our country because here money is transferred from one Indian to another. In everyday life, we will need to buy more goods or products in a store. It can be food items, housing items etc. For that we are developing this Desi Udaan: Atmanirbhar Bharat app. using this app, we can purchase goods or products online, register our business. User can register their business and reach out to more customers through this app. Business includes any homemade, small, medium business.

### 3. SYSTEM ARCHITECTURE

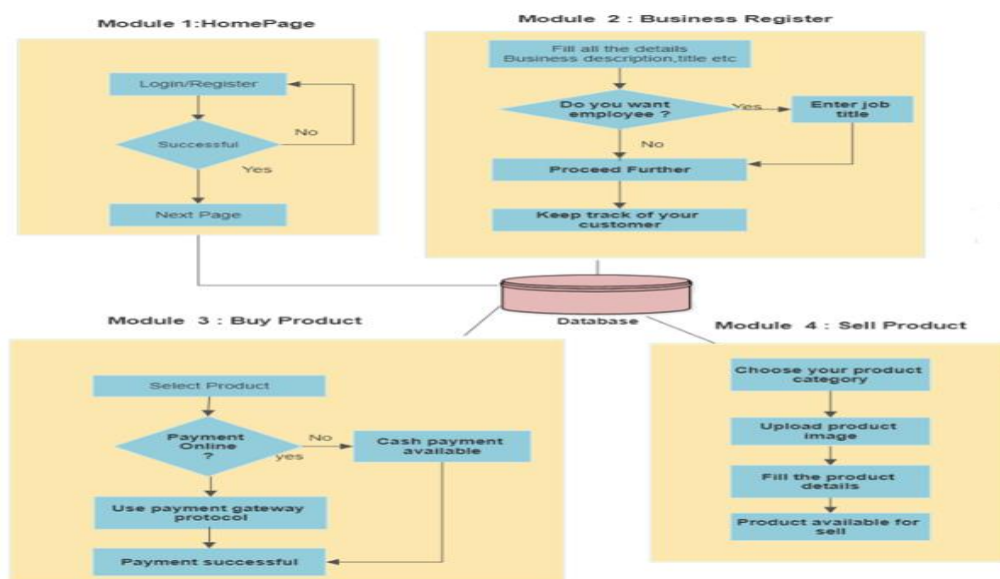


Fig 2: - System Architecture

This architecture diagram is a diagram of our proposed system i.e. used to abstract the overall outline of the software system and the relationships, constraints, and boundaries between components. It always helps relevant users to learn about the system & apply it in the decision-making procedures. The proposed system is divided into a number of modules. In the homepage module, users can log in and register for the further process using the username and password details. Then Business Registration module Users can add their small scale businesses, homemade business. For example homemade food items like cupcakes, Biscuits, Tiffin & etc. crafts also. Next is the Buy product module. In this module users can select products from different categories & then they will do the payment either online or cash mode whichever they consider as convenient. Then Sell Product, in

the sell product users can add the product category-wise & upload the product image and also fill the detailed information related to that specific product and then sell the product.

Login/Register: Using this login page users can access the proposed android application via filling the basic details, users have one is User Id and second one is password. And if user is new user then they should register to that system by filling the provided details and enter into the system

Direct Buying and Selling:

Sellers: The seller's means who are producing the various food items or any type of products and it can be selling through the mobile phone which gives complete information about the market place and their product cost.

Buyers: The buyers are the customers who wants to purchase a products/items from sellers. Buyers can see the details of that specific product and contact to seller using the details provided in this mobile app.

Business Registration: In this module we can register our small-scale businesses, medium-scale businesses or homemade businesses such as, homemade cupcakes, handbags, Agarbatti making business, Skin & Beauty Products, Organic Fruits/Vegetables, jewelry making business, and so on. There are we kept eight different categories. Suppose, we choose a specific category which is fruit then it shows the images of that fruit and details of that fruits. Now if we want to buy that fruit then there is add to cart button is provided click on that.

Add To Cart: When we choose products/items then it shows into add to cart and when their we can see the list of our selected products/items .Also if we want to increase or decrease the quantity of that selected products/items there is plus symbol is available for increasing and minus symbol available for decreasing and if we don't want to purchase that selected product or items then we can remove the selected products from add to cart. It shows the total amount of that selected products/items and then do the Payment.

Payment: It shows payment details while filling that details we can pay the total amount.

Services: The user who have register the business it shown in the services. Suppose someone looking for a plumber then they can search it in registered service option and get plumber contact details.

User Account: Here users can edit their details, and we can see the list of product which is users purchased and also we can see the businesses which is registered by users. Also it can reset their password and etc.

Category: After login, user can land to next activity i.e. category. There are categories like Farmer products, Grocery, Home and Kitchen, Baby Products, Pet supplies etc. For selling the product user can click on plus sign button. Also in this app there is a separate section for farmer. If user clicks on that category, user can able to see the activity where all the farmer products are listed.

My Business: In My Business section, user has to provide all the details about companies, business description, employee needs, job post.

Services: In services user can able to see all the registered businesses.

Get Job: If user selects get job option then user can see all the available businesses that need employees in their organization.

Profile: Here, user can see profile, update profile. This section has Setting option, Help and Support option.

Profile Side Bar: Here, user can make payment, see their order and check job status.

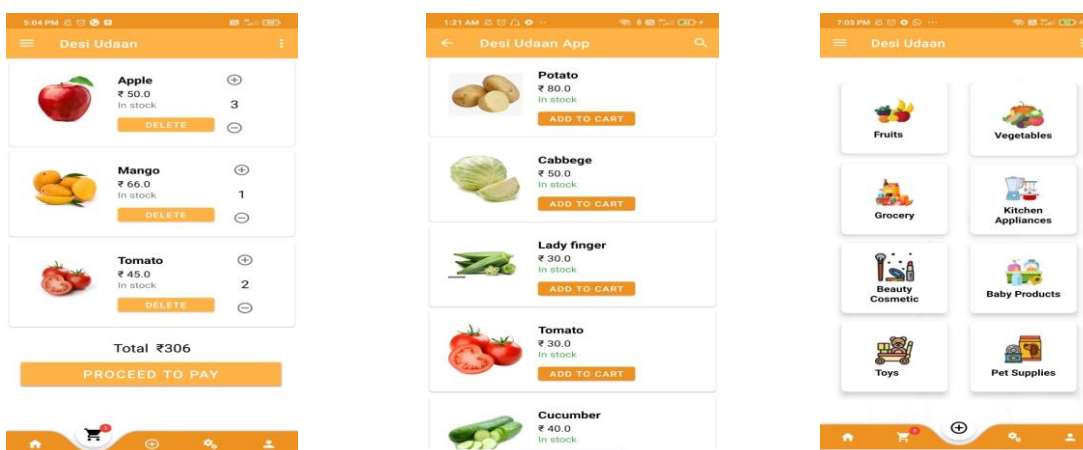
## 4. METHODOLOGY

### Shortest Path Algorithm

The shortest approach is a fundamental problem in the concept of graph. It can also be one of the main problems in network analysis. The shortest route problem is the problem of finding the shortest route or route from its starting point to the final destination. Algorithms include Digital Algorithm, Floyd-Warshall's Algorithm, Bellman-Ford Algorithm and Alternative Path Algorithm. Generally, to represent the problem of a very short route, we use graphs.

A graph is a visual mathematical object, consisting of sets of vertices and edges. The edges connect two pairs of vertices. Implement shortage path algorithm in our project. User start the application. The welcome screen will displays and then takes the User to the main screen Get User current location, Finding the shortest and quickest path or route from a current user location to a final destination of farmer. Calculate distance between two places.

## 5. Result And Analysis





## 6. FUTURE SCOPE

Atmanirbhar Bharat application can be easily implemented under various situations. We can add new features as and when we require like User can hear product name by selecting product. We can add more different category in existing app. Automated interview scheduling through acceptance/rejection of Resume. Pay more attention to elements like design, good presentation.

## 7. CONCLUSION:-

Atmanirbhar Bharat application is a very effective way to seller to sell and buyers to buy their products. Currently there are application available where user can buy Indian products online but not sell their products. In our app we provide facility to user to buy and sell products online. Online shopping helps to save time and money. User can register their business and reach out to more customers through this app. Business includes any homemade, small, medium business. This android based application which is portable and can be easily installed. It can be used on any mobile phones supporting Android OS. Through this app we encourage people to use more Indian products and make India independent on other country. This study has found that the use of this application can make India Atmanirbhar by increasing use of Indian products. This app provide the way to directly communicate with seller without any agents, selling and buying products in easy way.

## 8. ACKNOWLEDGEMENT

We express our sincere thanks to our project Guide Prof. Sandip Thite for his encouragement and support throughout our project especially for the useful Suggestions given during the course of Project and supported throughout this work. We also thank all the staff members for their help in making our project to work.

## REFERENCES:-

- [1] Smith Dubey, Harish Kumar Dubey July 2020 "Atmanirbhar Bharat Abhiyan: An Analytical Review". Vol-10 Issue 07, ISSN: 2347-7180, Dogo Rang sang Research Journal. [https://www.researchgate.net/publication/343139784\\_ATMANIRBHAR\\_BHARAT\\_ABHIYAN\\_AN\\_ANALYTICAL\\_REVIEW](https://www.researchgate.net/publication/343139784_ATMANIRBHAR_BHARAT_ABHIYAN_AN_ANALYTICAL_REVIEW)
- [2] Tri Pujadi , Bachtiar H. Simamora 18 January 2021 "Modeling of E-Commerce Supply Chains Mobile Application"IEEE , INSPEC Accession Number 20367664 , Publisher IEEE, Location Manado, Indonesia. <https://ieeexplore.ieee.org/document/9320757>
- [3] Akinwol Agnes Kikelomo , Yekini Nureni ,August 2018, "Design and Implementation of Mobile Map Application for Finding Shortest Direction between Two Pair Locations Using Shortest Path Algorithm", Volume: 09 Issue: 01 Pages:3300-3305(2017) ISSN: 0975-0290
- [4] Abishek A.G, Bharathwaj M, "Agriculture marketing using web and mobile based techniques", Chennai, India. 2016.
- [5] Justin J. Henrique, Beaudry E. Kock, " Empowering smallholders and local food markets with smartphones and social networks", United Kingdom 2012.
- [6] Aniket Bhave, Rahul Joshi, " Maha Form– An android based solution for Remunerative Agriculture", Mumbai, India.
- [7] Android Developer guide: <http://developer.android.com/guide/index.html>.
- [8] Android Power: <http://blogs.computerworld.com/raphael>
- [9] Android: <http://developer.android.com/reference/packages.html>