



DEVELOPERS

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Version 1.0

A project of FA Developers

## **Team Members**

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# PROJECT INITIATIVE

## OUTLINE PROJECT GOAL:

Our goal of the project is to provide an online e-commerce platform which help both owner and customers to buy and sell clothes online and the application is developed due to the following reasons

- Owner is facing problem due to the reason of Covid-19 in selling the clothes physically.
- Owner is facing problem of managing data and everything and also dealing with a single customer by showing them products and convincing them that is also time consuming.
- Customers can easily search and buy the product they want.
- Customer can also have customize item if they want, i.e. for any organization or for them self they can order and get customize item too.
- The system will help the owner in investing less and getting more by just having a warehouse.

## BASELINE:

This application is all about shopping online so the application has all the basic feature that can be used by the customer to order a product and that can make it easy for a customer to use the application facing no problem in anything, and getting their product ordered by this application These are the following baseline requirement that customer can get in this application:

**Login:** The application must have login page and that is must require.

**Home:** Home page should be there which show different products randomly.

**Wish list:** There should be a wish list for product.

**Add to cart:** There should be a page of add to cart.

**Search bar:** A search bar and filter.

**Customize Item:** There should be a page that show items that can be customize such as t-shirt of different type.

**Customize Order:** A page where requirement can be gather rightly what a person want in customize item.

**Checkout page:** A checkout page with the last few details and changes and finalize order.

**View Orders:** The order that are about to deliver can be cancel or delivered should be shown there.

The Customize Item is the unique feature of this application unlike any other ecommerce application it provides a unique way of ordering customize items according to your requirement.

## BUDGET:

The total budget of this project is 350\$ by calculating all resources and risks we set the budget to 350\$

## DEADLINE:

The owner of Kolachi want this project to be done in Jan of 2022 so we make it to the 18 Jan. An extra margin of 18 days to manage the product's flow and fix it to make the application work smoothly so that we can make it more reliable and more efficient to use.

## IDENTIFICATION OF STAKEHOLDER:

| Stakeholder           | Roles/Job/Dept | Stakeholder                     | Roles/Job/Dept |
|-----------------------|----------------|---------------------------------|----------------|
| Customer services     | Department     | eCommerce Project Manager       | Job title      |
| Customers End         | users          | Digital Marketing and eCommerce | Department     |
| Marketing             | Department     | Developers                      | Role           |
| Web Master            | Job title      | VP/Head eCommerce               | Job title      |
| Content Manager       | Job title      | eCommerce Consultants           | Job title      |
| Legal                 | Department     | Customer Care                   | Department     |
| Procurement           | Department     | Cloud Operations                | Department     |
| Finance               | Department     | Product Management              | Department     |
| Accounting            | Department     | Global eCommerce Director       | Job title      |
| Accounts receivables  | Department     | eCommerce Programme Manager     | Job title      |
| Logistics             | Department     | Distributor sales               | Department     |
| Warehouses            | Department     | Regional sales                  | Department     |
| Security              | Department     | Employees                       | End users      |
| IT security           | Department     |                                 |                |
| IT procurement        | Department     |                                 |                |
| Systems Architect     | Job title      |                                 |                |
| Technical Architect   | Department     |                                 |                |
| Solutions Consultant  | Job title      |                                 |                |
| Buyers                | Job title      |                                 |                |
| Social Media team     | Department     |                                 |                |
| Retail                | suppliers      |                                 |                |
| Supplier Transport    | suppliers      |                                 |                |
| Call Centres          | Department     |                                 |                |
| Data Warehouse        | Department     |                                 |                |
| Operations            | Department     |                                 |                |
| Back office           | Department     |                                 |                |
| Knowledge Manager     | Job title      |                                 |                |
| Sales Directors       | Job title      |                                 |                |
| Sales Engineers       | Job title      |                                 |                |
| Directors of Commerce | Job title      |                                 |                |

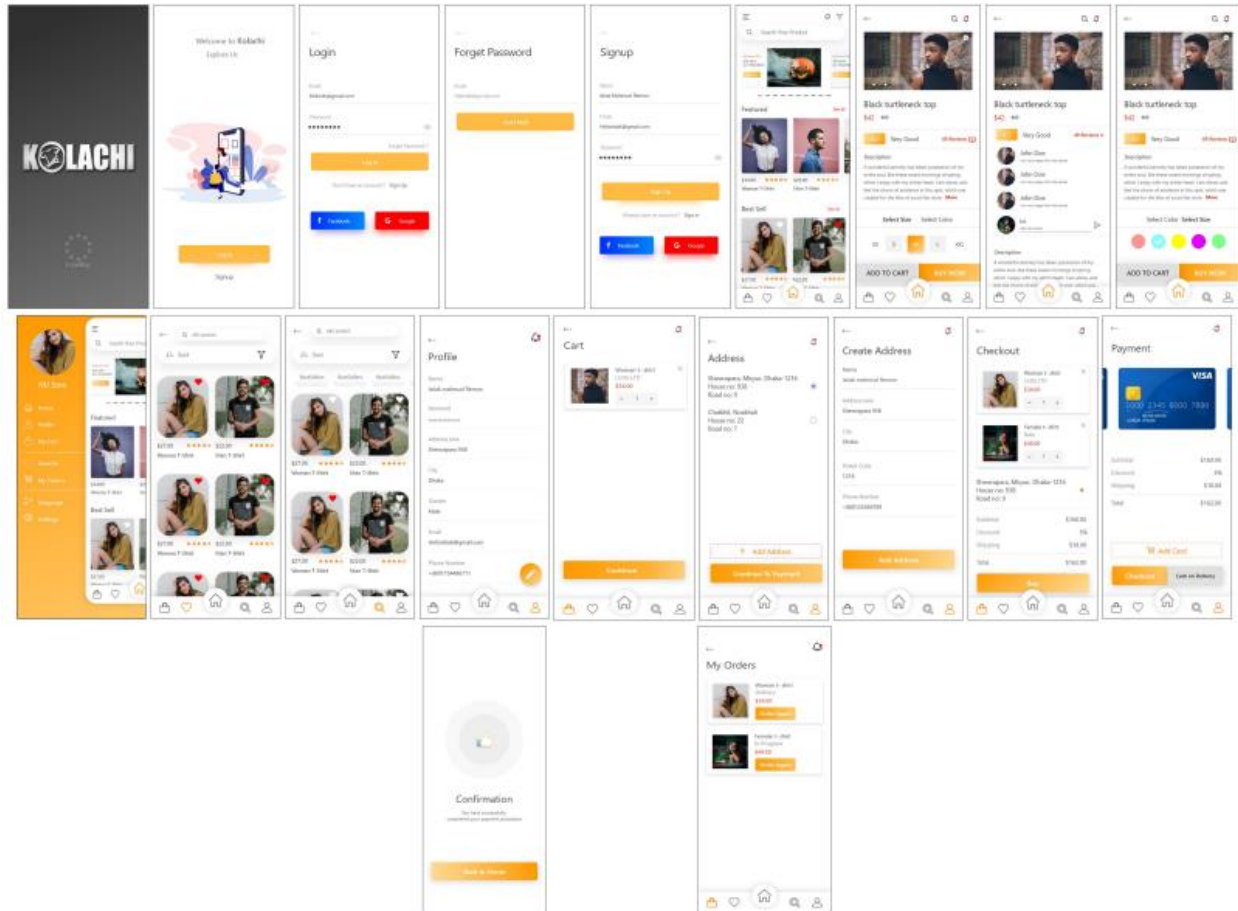
## PROJECT INITIATIVE

### BRAIN STORMING FOR REQUIREMENT GATHERING:

The brainstorming for this project make us thing about the different websites and application that are related to e-commerce and we find out some of the websites to help us out for our idea also we then collect information on how we can make sure that these application has all the requirement that we need to implement in our system because e-commerce application are similar in many ways

| Name                                    | Link  |
|---|---|
| Daraz (Shopping platform) UI Idea       | <a href="https://www.daraz.pk/">https://www.daraz.pk/</a>             |
| Ali Express (Shopping platform) UI idea | <a href="https://www.aliexpress.com/">https://www.aliexpress.com/</a> |
| Kaghaz.pk (Diaries) Customize item idea | <a href="https://kaghaz.pk/">https://kaghaz.pk/</a>                   |

But to make it more clear we make a prototype that can clear all the requirements that can be gather and remove all confusion.



## ANALYSIS OF PAST PROJECTS:

A Like this project there are many project in the past that are similar to it due to the reason of being an e-commerce application we can see similar application and websites which are:

- Daraz
- Ali express
- Kaghaz

We have got the basic idea of the e-commerce by the application of Daraz and Ali express, while we got the idea of making product on the requirement of a customer and how to gather the requirement by an application or website and how the process of from searching or picking a product to making it deliver to someone doorstep and how many things the application or a website show, we learn by analyzing these three website and application.

## TASK BREAKDOWN

### MAJOR TASK BREAKDOWN

We broke down our project into four major part:

1. Requirement
2. Design
3. Construction
4. Testing & Finishing

### SUB TASK BREAKDOWN

#### Requirement

- Identify Business Requirement
- Requirements Gathering
- Requirements Documentation
- Requirement Review
- Requirement Sign-off
- Draft Project Proposal

#### Design

- Logo Designing
- Prototype
- UML

#### Construction

- Configure Architecture
- Code Screens (Front-end)
- Create Database (Back-end)
- Create API's (Back-end)
- Back-end & Front-end Integration
- Manage States, UI Flow & Architecture

#### Testing & Finishing

- Unit Testing
- Testing by automation
- Resolve pending issues
- Deploy system

## TASK BREAKDOWN CHART



## LIST OF ALL ACTIVITIES THAT ARE ASSIGNED TO GROUP MEMBERS

| ID | Task Mode | Task Name                        | Duration       | Start         | Finish        | Assign to            | 24 |
|----|-----------|----------------------------------|----------------|---------------|---------------|----------------------|----|
| 1  | ★         | <b>Kolachi Clothing</b>          | <b>50 days</b> | <b>Nov 10</b> | <b>Jan 18</b> | <b>Assignment by</b> |    |
| 2  | ★         | <b>Discussion</b>                | <b>24 days</b> | <b>Nov 10</b> | <b>Dec 11</b> |                      |    |
| 3  | →         | Taking Information               | 3 days         | Nov 10        | Nov 14        | All 3 of us          |    |
| 4  | →         | Project Proposal                 | 4 days         | Nov 15        | Nov 18        | Fahad                |    |
| 5  | →         | Requirement Gathering            | 2 days         | Nov 19        | Nov 22        | Muhammad Ali         |    |
| 6  | ★         | UML designs                      | 3 days         | Nov 23        | Nov 25        | Ahmed                |    |
| 7  | →         | Requirement Document             | 3 days         | Dec 8         | Dec 11        | Fahad & Ahmed        |    |
| 8  | ★         | <b>Designing</b>                 | <b>10 days</b> | <b>Dec 1</b>  | <b>Dec 14</b> |                      |    |
| 9  | →         | Logo Designing                   | 3 days         | Dec 1         | Dec 3         | Ahmed                |    |
| 10 | →         | Prototype                        | 7 days         | Dec 6         | Dec 14        | Fahad                |    |
| 11 | ★         | <b>Construction</b>              | <b>20 days</b> | <b>Dec 15</b> | <b>Jan 11</b> |                      |    |
| 12 | →         | Designing and development screen | 10 days        | Dec 15        | Dec 28        | Fahad                |    |
| 13 | ★         | Database                         | 7 days         | Dec 29        | Jan 6         | Fahad                |    |
| 14 | →         | Combining all modules            | 3 days         | Jan 7         | Jan 11        | Fahad                |    |
| 15 | ★         | <b>Testing &amp; Finishing</b>   | <b>6 days</b>  | <b>Jan 11</b> | <b>Jan 18</b> |                      |    |
| 16 | →         | Unit Testing                     | 2 days         | Jan 11        | Jan 12        | Muhammad Ali         |    |
| 17 | →         | Test by automation               | 1 day          | Jan 13        | Jan 13        | Ahmed                |    |
| 18 | →         | Resolving remaining issues       | 2 days         | Jan 14        | Jan 17        | Fahad                |    |
| 19 | ★         | Deployment and Finishing         | 1 day          | Jan 18        | Jan 18        | Fahad                |    |

## CRITICAL PATH ANALYSIS:

**ACTIVITY A:** REQUIREMENT = 5 days

**ACTIVITY B:** PROTOTYPE = 7 days

**ACTIVITY C:** UML = 4 days

**ACTIVITY D:** ARCHITURE = 1 days

**ACTIVITY E:** CODE = 10 days

**ACTIVITY F:** DB = 2 days

**ACTIVITY G:** API = 1 days

**ACTIVITY H:** UI = 6 days

**ACTIVITY I:** TESTING = 4 days

**ACTIVITY J:** DEPLOY = 1 days

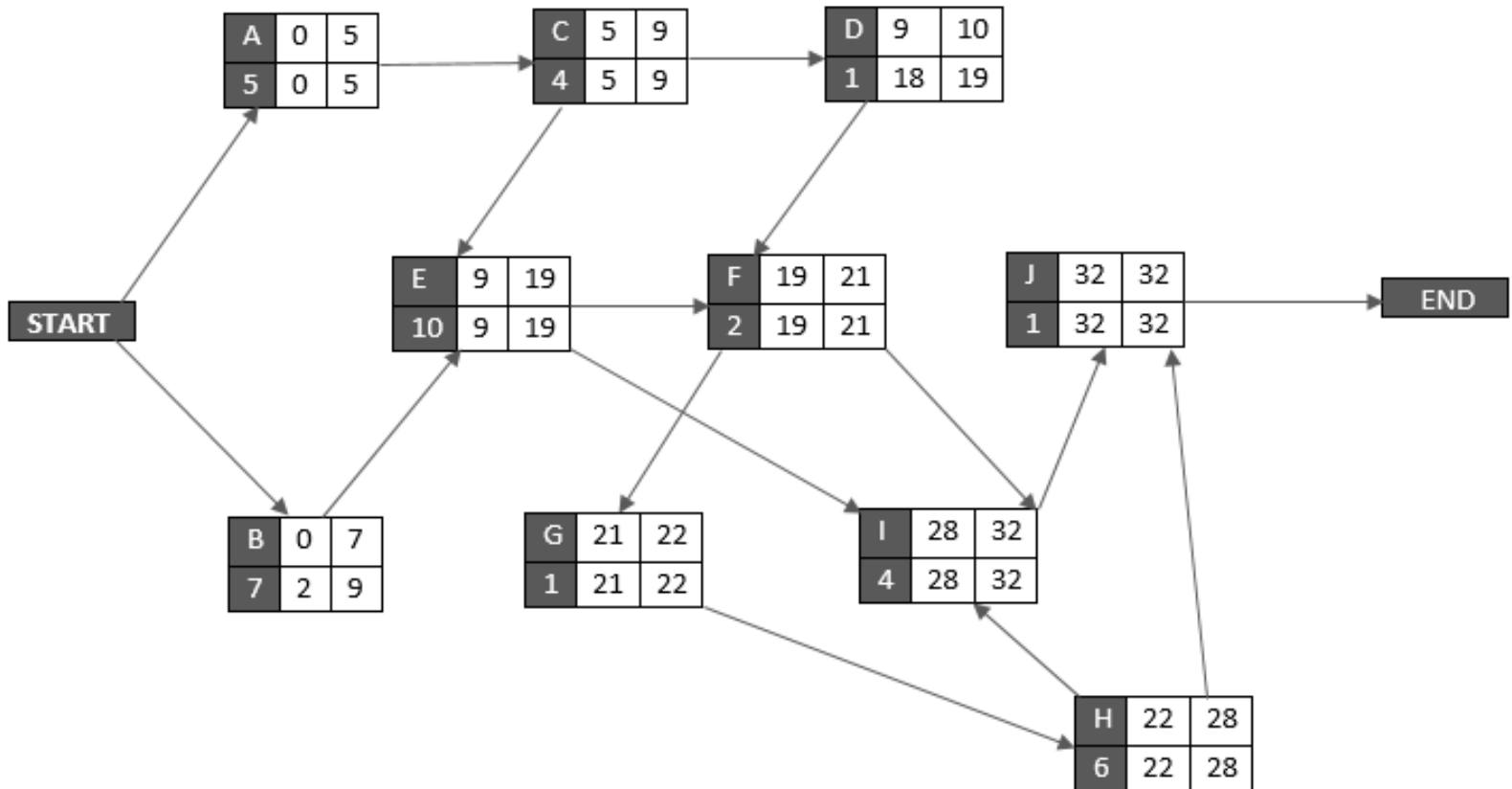
## CRITICAL PATH CHART

This chart has all the detail from early start to early finish, and late start to late finish these are the main activities that are used in the chart and the critical part is calculated from it.

| Activity Name | Symbols | Duration | Predecessor | ES | LS | EF | LF | Float |
|---------------|---------|----------|-------------|----|----|----|----|-------|
| REQUIREMENT   | A       | 5        | -           | 0  | 0  | 5  | 5  | 0     |
| PROTOTYPE     | B       | 7        | -           | 0  | 2  | 7  | 9  | 2     |
| UML           | C       | 4        | A           | 5  | 5  | 9  | 9  | 0     |
| ARCHITURE     | D       | 1        | C           | 9  | 18 | 10 | 19 | 9     |
| CODE          | E       | 10       | B,C         | 9  | 9  | 19 | 19 | 0     |
| DB            | F       | 2        | D,E         | 19 | 19 | 21 | 21 | 0     |
| API           | G       | 1        | F           | 21 | 21 | 22 | 22 | 0     |
| UI            | H       | 6        | G           | 22 | 22 | 28 | 28 | 0     |
| TESTING       | I       | 4        | E,F,H       | 28 | 28 | 32 | 32 | 0     |
| DEPLOY        | J       | 1        | I,H         | 32 | 32 | 22 | 33 | 0     |



## CRITICAL PART FROM START TO END

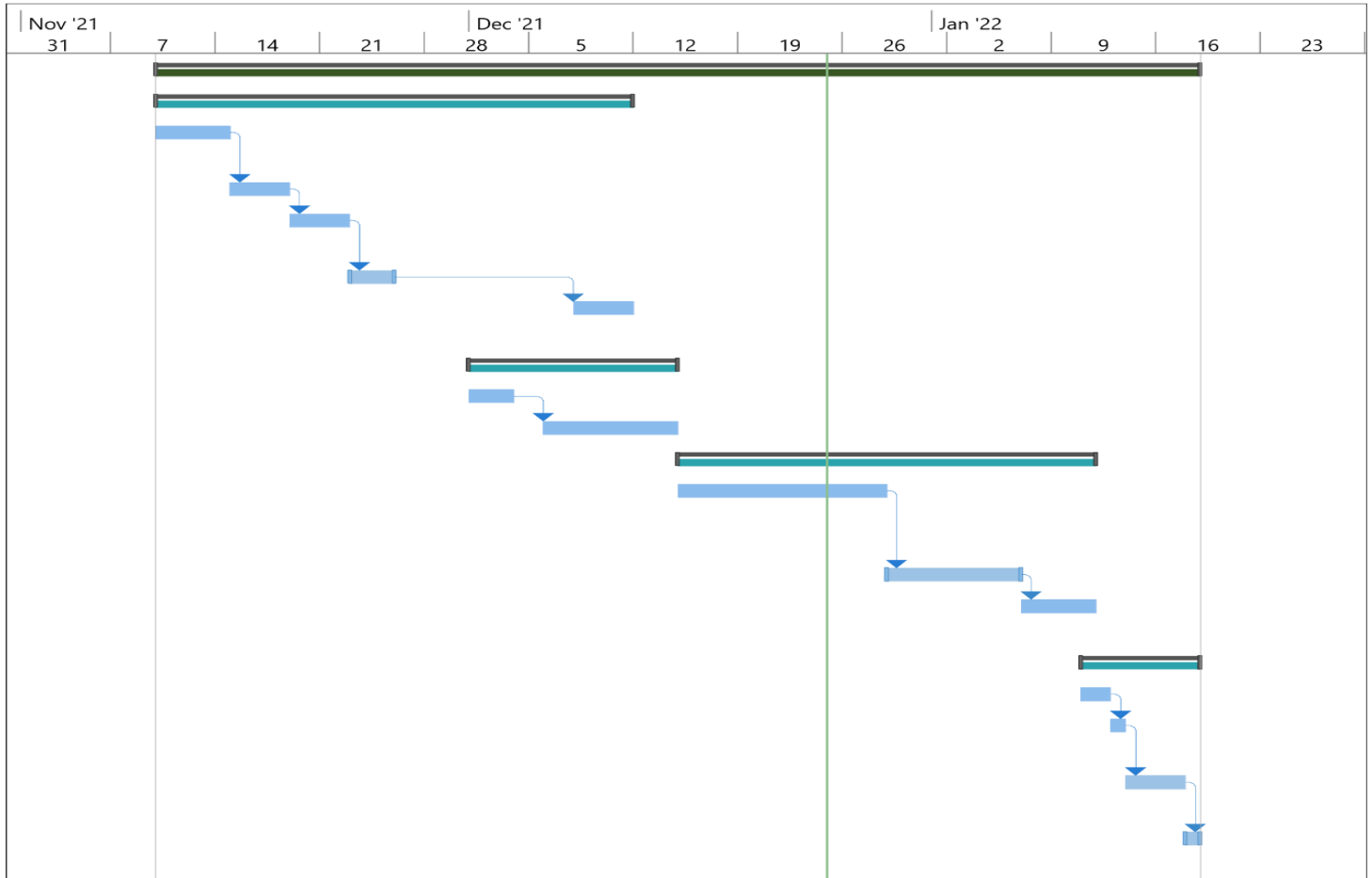


The total day time is 33 days

The critical path of these activities are:

A, C, E, F, G, H, I, J

## ESTIMATE TIMELINES



Project: KOLACHI Gantt Chart  
Date: Dec 25

|                    |  |                       |  |
|--------------------|--|-----------------------|--|
| Task               |  | Manual Summary Rollup |  |
| Split              |  | Manual Summary        |  |
| Milestone          |  | Start-only            |  |
| Summary            |  | Finish-only           |  |
| Project Summary    |  | External Tasks        |  |
| Inactive Task      |  | External Milestone    |  |
| Inactive Milestone |  | Deadline              |  |
| Inactive Summary   |  | Progress              |  |
| Manual Task        |  | Manual Progress       |  |
| Duration-only      |  |                       |  |

# RESOURCES

## RESOURCES IDENTIFICATION

### TOOLS/ PLATFORM

#### 1) Resource Details

- a) Designing
- b) Adobe XD
- c) Adobe Illustrator CC 2019
- d) Adobe Photoshop CC 2019
- e) Adobe Light Room
- f) Paint
- g) Word (for PDF print)

#### 2) Construction

- a) Flutter Dart SDK
- b) VS code (for coding)
- c) Android Studio ()
- d) Mobile device for outcome
- e) State management tool (getX)

#### 3) Database

- a) Firebase Account
- b) Node.js
- c) Express (DB connection)

#### 4) VS code Extension

- a) Auto Import
- b) Dart
- c) Dart (Syntax Highlighting Only)
- d) dart-import
- e) Encrypted Notes
- f) Flutter
- g) formate-custom: CSS/LESS/SCSS formatter
- h) GitLens — Git supercharged
- i) GitHub Theme
- j) Just Start Server
- k) git-auto-commit

#### 5) Pc resource

- a) Microsoft® Windows® 7/8/10 (64-bit)
- b) 4 GB RAM minimum, 8 GB RAM recommended.
- c) 12 GB of available disk space minimum,
- d) 4 GB Recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image)
- e) 1280 x 800 minimum screen resolution.

#### 6) Human Resources

Team consist of three members

- Muhammad Ali Haider (Project Manager)
- Muhammad Fahad (Developer)
- Ahmed Amin (QA)

#### 7) Time & Cost

- Time: 2 months
- Cost: 350\$

# OUR ANALYSIS

## POTENTIAL RISKS AND IMPACT

There can be many risk and impact but in our case these can be the risk & impacts:

### **Time**

The first risk is time management in our project that we should not cross the deadline even there is a problem or change we have to make in software.

### **Cost**

The cost should not exceed or we will be in a loss making that software so that we have to manage our cost and work in the boundaries make processes to manage everything.

### **Environmental**

There can be environment change which can cause in delay of developing that can make a burden on the other days.

## CONTINGENCY PLANS

There can be processes that can help in managing risks

### **Time**

The first risk is time so we can manage it by making it extra 18 days of January so we can manage any changes and resolve problems if there is any in the software.

### **Cost**

The second one is cost as we know that the cost can be increase if there is any change management the client asks for so we already make the cost to 300\$ + 50\$ which is 50\$ extra for the change management and any other problem we face which lead to extra use of resources.

### **Environmental**

There can be environmental changes which can cause problem so in that situation some of the work can be done from home, we can follow the work from home.

# TASK MANAGEMENT & COMMUNICATION PLATFORM

## FUNCTIONAL REQUIREMENT

These are the functional requirement

| ID    | Requirement  | Priority | Raised By |
|-------|--|----------|-----------|
| AUT1  | The person can Sign up ( by google, Facebook or email).                  | Critical | Customer  |
| AUT2  | The person can login (by google, Facebook or email).                     | Critical | Customer  |
| ATC1  | The person can add product to its cart.                                  | High     | Customer  |
| SER1  | The person can search product  | High     | Customer  |
| FILT1 | The person can filter out according to their needs                       | High     | Customer  |
| PM1   | The person can pay online too by PayPal.                                 | Medium   | Customer  |
| CAN1  | The person can cancel order  | High     | Customer  |
| WL1   | The person can add product to wish list                                  | Medium   | Customer  |
| PROF1 | The person can setup his profile   | Low      | Customer  |
| PM2   | The person can make transaction by different method such as banking etc. | Future   | Customer  |

## NON-FUNCTIONAL REQUIREMENT

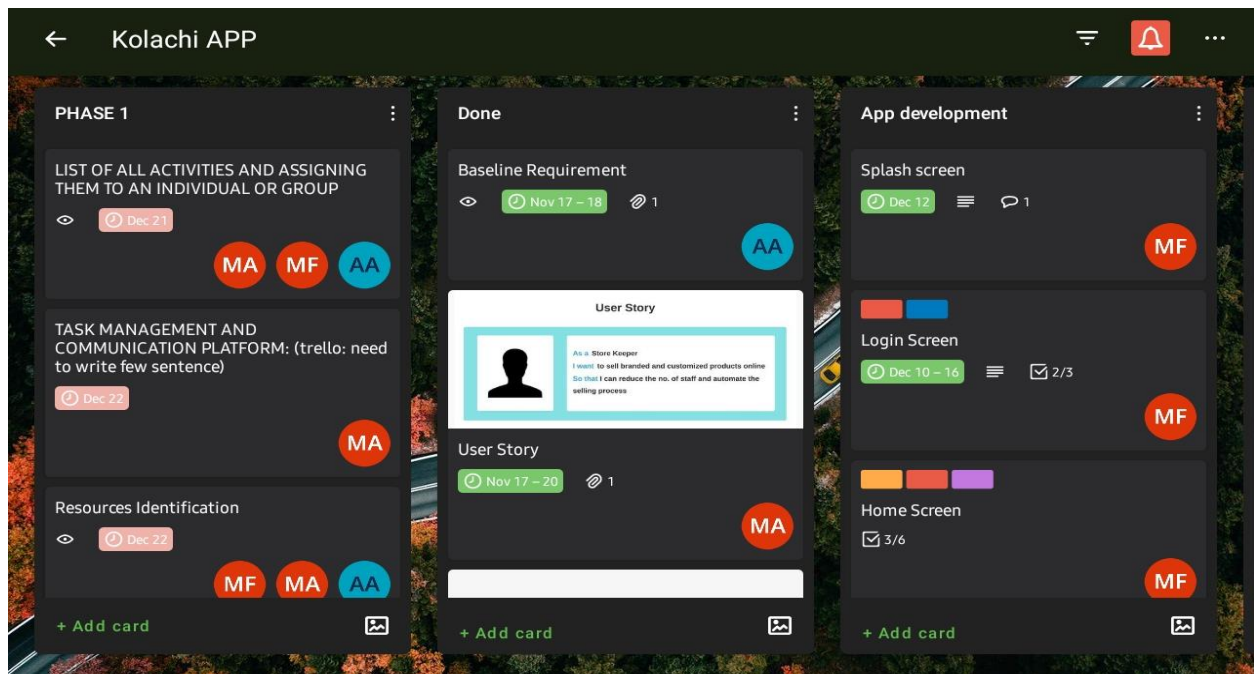
These are the non-functional requirement:

| ID                     | Requirement   |
|------------------------|---|
| NFR 1 (Security)       | The application should have secure transactions.                          |
| NFR 2 (Usability)      | The UI will be easy to use and user friendly.                             |
| NFR 3 (Performance)    | The application can handle traffic.                                       |
| NFR 4 (Availability)   | It should be available all the time 24/7.                                 |
| NFR 5 (Recoverability) | If application crash during address entering the order should be in cart. |

## PLATFORM

### Trello

Trello is a web-based, Kanban-style, list-making application and is developed by Trello Enterprise, a subsidiary of Atlassian. Created in 2011 by Fog Creek Software, it was spun out to form the basis of a separate company in New York City in 2014 and sold to Atlassian in January 2017



It has many feature some of them are

- Work can be assign with the deadline that remind one day before due.
- Every team mate can see all the working files that are attach to the work and how much work is done.
- Everyone can work according to the time that is provided and description of the work that is provided in it.
- Work can be managing by making different task and adding cards to it.

## EVALUATION OF PRODUCT

We have performed test cases of different types most of them are passed and because of that we have come to a point that now we should take the owner's feedback and also get the customers or stakeholders survey so that we can get to know that how much this application can be useful if it is launch in the market. And also we have to notice the things that what we can do to make Kolachi more user friendly and according to the user so that it will be more used by the users

## SOLUTION

After taking feedbacks and surveys we now discuss the solutions that we can make the application better and which approach we should follow to make it better so that we can get most of the feedback positive. And we can manage the changes.

The application can go to three phases again one of them is compulsory which are:

- Designing changes
- Developing change
- Testing (compulsory)

### **Designing changes**

If the stakeholder wants changes in design on the basis of feedback of the stakeholders that are involve in using or developing the application, we have to make sure that in the change management the issue will be resolved and final product will be good in design as according to the stakeholder change requirement.

### **Developing changes**

If the stakeholder wants any new feature so, he can ask for it and it will be proceeding in the change management making the application better for the customer and satisfy their needs according to their requirement of new feature.

### **Testing (compulsory)**

Testing will happen in both cases if its change in design or development so that we can see the application responsiveness and working that is after change management and if there is any flaw we will fix it so that the final product is free of flaws and work smoothly.