

Bachelors of Science in Information Technology

**Gyalpozhing College of Information Technology**



**Proposal**  
**For**  
**Second Year Project**  
**Bachelor of Science in Information Technology**

**Shopping List**

**Submitted by**  
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**Gyalpozhing College of Information Technology**

## **Read carefully before filling the form.**

1. Please do not alter the layout of the application form. Information must be filled in the spaces provided, under set format.
2. Guidance notes in various fields should not be deleted.
3. Required information should be duly filled in the specified fields.
4. Required heads/fields which are not relevant to the project should be marked **N/A** (Not Applicable) or left blank and should not be deleted.

## **Guidelines and Forms**

### **Submission Procedure**

Duly filled proposal forms completed in all respects should be submitted in form of soft copy and a hard copy to project guide and project coordinator. On receipt of the applications the proposals will be evaluated by reviewer panel and proposal would then be defended by student groups. The project group may need to revise the proposal in light of the evaluator's recommendations.

### **For further information, please contact:**

Project Coordinator

Sonam wangmo

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**Note:** To update the table of contents, right click in the table and select '*update field*' and then select 'Update Entire Table'.

**Application for Final Year Project****1. Project Identification**

<b>A. Reference Number:</b>  (for office use only)	
<b>B. Project Title:</b>  	
<b>C. Project Internal Guide:</b>  Name: _____ Designation: _____ Organization: _____ Mobile # : _____ Tel. # : _____ Email: _____	
<b>C1. Project External Guide:</b>  Name: <b>NA</b> Designation: _____ Organization: _____ Mobile # : _____ Tel. # : _____ Email: _____	
<b>C2. Student Group Lead:</b>  Name: _____ Roll No: _____ Department: _____ Mobile # : _____ Tel. # : _____ Email: _____	

**D. Organizations Involved in the Project:**

*(Please identify all affiliated organizations collaborating in the project, and describe their role/contribution to the project.)*

**D1. Industrial Organizations:**

#	Organization Name	Role / Contribution
	NA	

**D2. Academic Organizations:**

#	Organization Name	Role / Contribution

**D3. Funding Organizations:**

#	Organization Name	Role / Contribution
	NA	

**E. Key Words:**

*(Please provide a maximum of 5 key words that describe the project. The key words will be incorporated in our database.)*

**F. Research and Development Theme:**

To develop an application where the users will be able to jot their list of shopping that are made daily in an organized manner and to avoid using dairy.

**G. Project Status:**

(Please mark ☒)

☐ New      ☒ Modification to previous Project

☒ Extension of existing project

**H. Project Duration:**

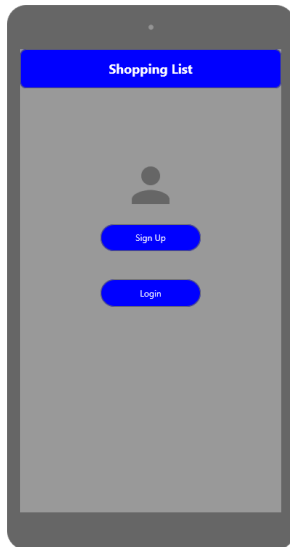
Expected Starting Date: \_\_\_\_\_

Planned Duration in months: \_\_\_\_\_

**2. Scope, Introduction and Background of the Project****A. Scope of the Project:**

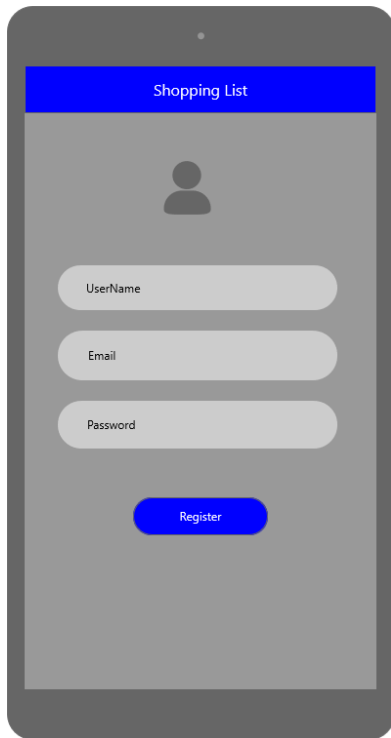
The scope of my project is limited to the students of GCIT. Even today we use paper or diary to take the list of shopping items.

We are going to develop an android based application with the following features:

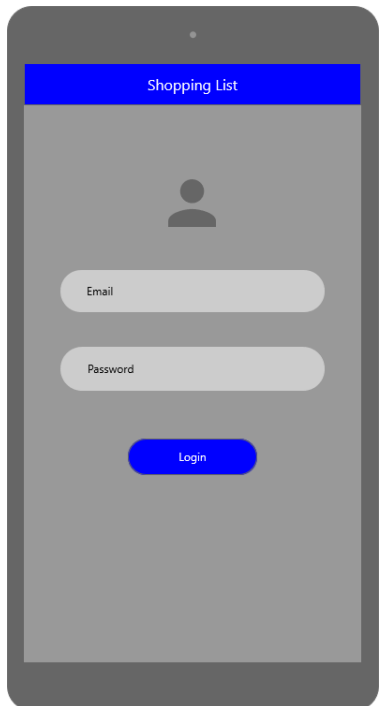


1. Registration: The user has to first register in order to access all the features.





2. Login: The user has to login in order to view all the other details.

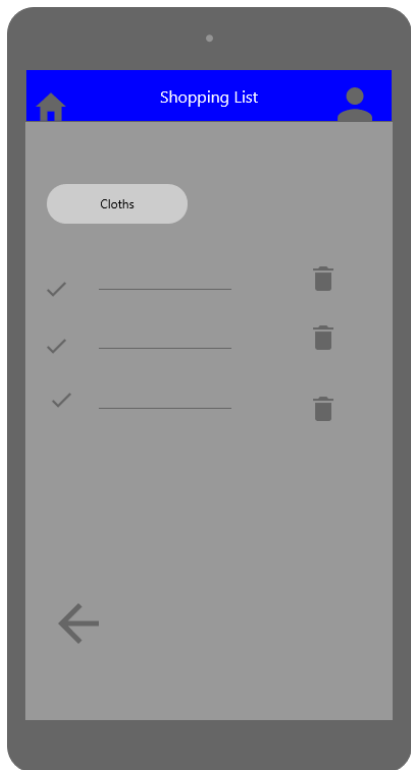
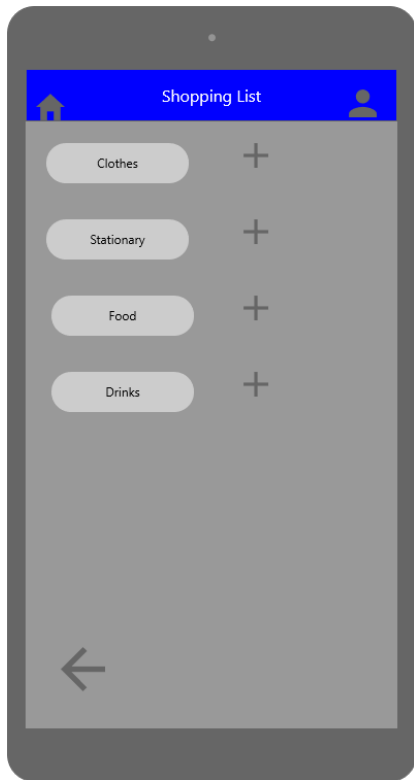


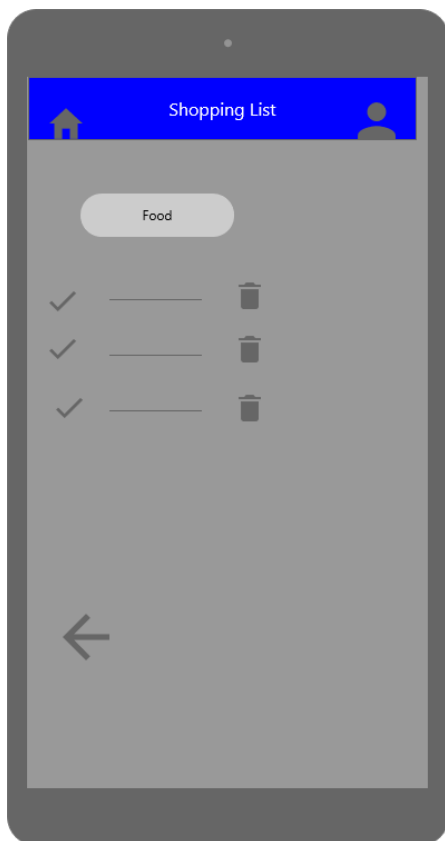
Homepage:



3. User Profile: The user can view all the details of the expenses that are made according with the date.

4. Categories: The user can keep track of the expenses that are made by categorizing them.







5. Notification: Notification will be send to both the students as well as the parents.
6. The link of prototype:



prrototype.mp

### User Scope

The target of our project is the students of GCIT (Gyalpozhing College of Information Technology)

**B. Introduction (Project Background and Literature Review, Current State of the Art):**

*(Detailed summary of what all has been done internationally in the proposed area quoting references and bibliography. Please note that this section demonstrates the depth of knowledge of the project team and builds the confidence of the evaluators about capability of the team in achieving the stated objectives.)  
(Please describe the current state of the art specific to this research topic.)*

A **shopping list** is a list of items needed to be purchased by a shopper. Consumers often compile a shopping list of groceries to purchase on the next visit to the grocery store (a **grocery list**). The shopping list was known 2000 years B.C. in ancient Mesopotamia. The shopping list itself may be simply a scrap piece of paper or something more elaborate. There are pads with magnets for keeping an incremental list available at the home, typically on the refrigerator, but any magnetic clip with scraps of paper can be used to achieve the same result. There is even a specific device that dispenses a strip of paper from a roll for use in a shopping list. Some shopping carts come with a small clipboard to fit shopping lists on.

Although a substantial amount of applications has been produced in various mobile platforms for online grocery shopping and comprehensively data mining techniques have been applied on sales data for interest mining, the requirement has always been present for a solution to enhance static grocery shopping experience of people. Up to the present time people use traditional ways of carrying out these activities such as writing on a piece of paper or memorizing items to be bought which are not reliable and eventually leads to time and money loss. Coming up with a solution which has a capacity of properly addressing the above issues would be much beneficial for the users in terms of both financially and lifestyle improvement.

Consequently, shopping list is a mobile application intended to run on android devices namely smart phones which will be designed efficiently for the user to keep their daily activities which deals with the shopping. This application is developed in hope to help the students manage their shopping items as well as finances. It automatically tracks and categories every expenses that they are going to buy. An application that will allow user to effectively manage his or her items to be purchased. With this application one can able to know in which area they are spending their money and they need not have to jot their items in a paper manually as well as they can prioritize their things that are more important to them.

**Literature Review:**

Consumers increasingly describe themselves as under time pressure (Dholakia, 1999), resulting in an investigation into ways to increase their efficiency, including how they undertake routine activities such as grocery shopping (Herrington & Capella, 1995; Hultén & Vanyushyn, 2011). One way to do this is through the use of a physical or mental shopping list (Gijsbrechts, Campo, & Goossens, 2003). A physical list is a written paper, while the mental list is stored in the memory (Hultén & Vanyushyn, 2011; Thomas & Garland, 2004). This study focuses on the physical shopping list due to their widespread use and the ease with which these can be collected and compared with actual receipts.

**Current State of Art:**

A lot of application have been developed to make list of shopping but are not so popular. Even to this days people are still maintaining dairy to keep record of the shopping list that are going to purchase. Some uses phone to keep track of the expenses with no proper details.

**C. Challenges:**

*(Please describe the challenges, specific to this research topic, currently being faced internationally.)*

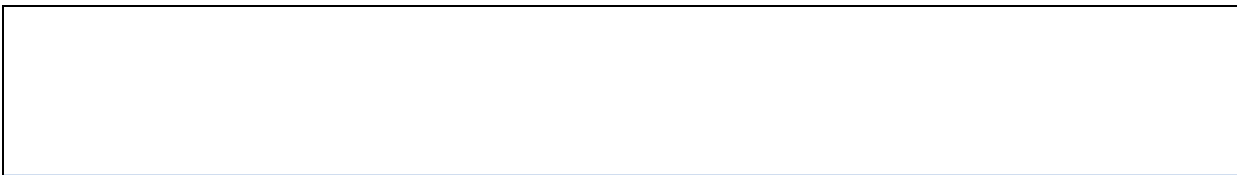
1. I might face problems due to hardware failures.
2. As an amateur developer, I may not be able to complete my project on time.
3. The application may not have all the categories the user need.

**D. Motivation and Need:**

*(Please describe the motivation and need for this work.)*

To do a shopping one have to note down all the items in a book/piece of paper on other hand they have to memorize the items to be purchase as result it increases the work load of a person even if they memorize there is every chances that one can forgot the things to buy, so they have to go second time to buy same item which results in wastage of time.

Thus, I decided to develop an application which will help the students to keep list of shopping items to purchase.





### 3. Aim and Objectives of the Project

*(Please write the actual aim of your project. Also, describe the measurable objectives of the project and define the expected results. Use results-oriented wording with verbs such as 'to develop..', 'to implement..', 'to research..', 'to determine..', 'to identify..' The objectives should not be statements and should not include explanations and benefits. The objective should actually specify in simple words what the project team intends to achieve (something concrete and measurable/ deliverable). Fill only those objectives that are applicable to the proposed project.)*

**Aim:** The aim of my project is to develop an application which will help the students to make their shopping easier.

**OBJECTIVES:**

1. To develop a platform to make their shopping easier and do grocery shopping more consciously.
2. To reduce workload of the students.
3. To help users to prioritize their shopping items.

## 4. Methodology

### A. Development / Research / Test Methodology:

*(Please describe the technical details and justification of your development and research plan and test plan and testing strategies. Identify specialized equipment, facilities and infrastructure which are required for the project and their utilization plan. The block diagrams, system flow charts, high level algorithm details etc. have to be provided in this section. Also, describe the overall methodology to be used for the particular research topic)*

#### **Problem statement**

If an individual want to purchase items from groceries one has to plan in their mind that which items to buy, which cause further workloads. There is chances that one cannot go as per their plan which may leads them to buy things that are not required to them. Therefore, as a solution an application is to be developed.

#### **Planning**

In this phase, the general information of the project and make an overview of the project.

#### **Requirement gathering and Analysis**

Start collecting relevant information from the research papers and existing system. After collecting, work on understanding the problems in detail and do some brainstorming and conduct a survey related to the project.

#### **Design**

In this phase, a design (or a prototype) will be prepared from the requirements that was collected in the previous phase.

#### **Coding/Implementation**

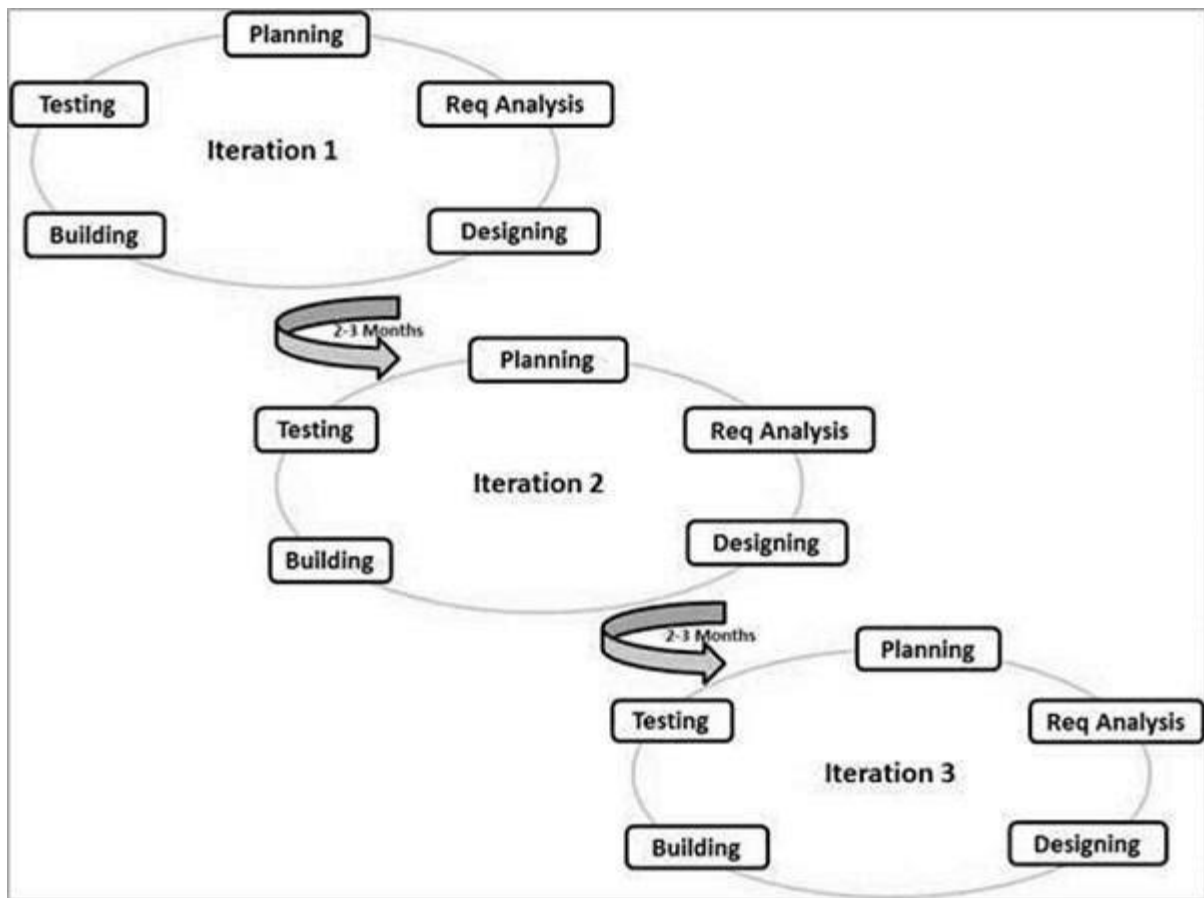
After designing a prototype, actual coding will be started.

#### **Testing**

After coding, it will be tested for its functionalities.

#### **Documentation**

Finally, after completing all the phases a final report will be prepared.



### Agile Model

An agile model is a combination of iterative and incremental process model. It breaks the product into small incremental builds. These builds are provided in iterations. At the end of each iteration, a working product is produced.

<b>B. Project Team:</b>	
<i>Title / Position</i>	<i>Number</i>
Project Internal Guide	
Project External Guide	
Student Team Members	
Others (please specify)	
Add more rows if required	

**C. Project Activities:**

*(Please list and describe the main project activities, including those associated with the transfer of the research results to customers/beneficiaries. The timing and duration of research activities are to be shown in the Gantt chart in Section 8.)*

1. Requirement Gathering: Video tutorials, online references and books related to android app development and XML.
2. Design Phase: It includes designing user interface, database design and understanding the functionalities of the features.
3. Development Phase: In this phase, development of the app starts with coding.
4. Testing: The product will be tested for its functionalities and will also be carried out for integration testing to ensure that it produces a desired function.
6. Final Documentation: After all the phases are done we will document about the project and will prepare a final report for our project.

**D. Key Milestones and Deliverables:**

*(Please list and describe the principal milestones and associated deliverables of the project. A key milestone is reached when a significant phase in the project is concluded, e.g. selection and simulation of algorithms, completion of architectural design and design documents, commissioning of equipment, completion of test, etc.) The timing of milestones is also to be shown in the Gantt chart in Section 8.*

No.	Elapsed time from start (in months) of the project	Milestone	Deliverables
	-	Commencement of the project	
	9/02/2021-13/02/2021	Topic Selection	Selection of topic
	14/02/2021-20/02/2021	Brainstorming & survey on topic	Feasibility study
	20/02/2020-27/02/2020	Requirement gathering	Feasibility study
	28/02/2020-14/03/2020	Project proposal writing	Project proposal report
	15/03/2020-20/03/2020	Designing of project	UI design
	01/04/2020-25/05/2020	Testing	Testing
	16/05/2020-21/05/2020	Documentation of project	Documented
(Please add more rows if required.)			

**5. Benefits of the Project (Expected output/outcomes):**

**1. It saves you time and energy.**

Having a list of to-buys lets you prioritize your spending on what you really need at the moment. You're also likely to stick to the aisles and sections where your items are located instead of exploring other areas where plenty of "great products" are waiting to be discovered.

The waiting period between making the shopping list and going to the store also gives you time to decide on whether you really need all the listed items or they can wait for another time. This will help you stay within your budget and protect your savings in the long run.

**2. It saves you time and energy.**

The items in the store are organized according to their types (e.g. skincare, baby products, kitchenware, etc.), but the wide product choices can distract you from going directly to the item you're supposed to buy.

When you have a list of items to buy, you simply need to locate them on their designated shelves instead of wandering aimlessly around the store aisles.

**3. Minimize waste**

A grocery lists ensures you only buy what you intended to, therefore saving you from buying too much food that will end up going bad and being thrown out.

**6. Risk Analysis/Feasibility****A. Risks of the Project:**

(Please describe the factors that may cause delays in, or prevent implementation of, the project as proposed above; estimate the degree of risk.)

(Please mark ☒ where applicable)

Low      Medium      High

Technical risk

Timing risk

Budget risk

**1. Comments(Describe the risk):****1. Technical Risk:**

As an amateur developer, I might face some technical risk such as

- Handling sophisticated software.
- I may be not get all the resources that are required to develop an application.
- I might face some hardware problems (4GB RAM).

**2. Timing Risk:**

We might face some risk regarding time such as

- I might not be able to complete our project within the given time period.
- Pre-planned schedule may get delayed.



*(Approval of Project Proposal by the Competent Authority (Department Chairman) and Project Review Team is mandatory before the start of project execution.)*

Sl #	Name	Signature
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**8. Reviewers Panel Comments**

### **13. Report Writing Guidelines**

*(Project report will be written under the specified guidelines.)*

## Bibliography

- Dholakia, R. R. (1999). Going shopping: key determinants of shopping behaviors and motivations. *International Journal of Retail & Distribution Management*, 27(4), 154-165.  
doi:10.1108/09590559910268499
- Gijsbrechts, E., Campo, K., & Goossens, T. (2003). *The impact of store flyers on store traffic and store sales: a geomarketing approach*. *Journal of retailing*, 79(1), 1-16.  
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- Herrington, J. D., & Capella, M. L. (1995). *Shopper reactions to perceived time pressure*. *International Journal of Retail & Distribution Management*, 23(12), 13-20.  
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- Thomas, A., & Garland, R. (1993). *Supermarket shopping lists: their effect on consumer expenditure*. *International Journal of Retail & Distribution Management*, 21(2).