

# **Software Requirements Specification**

**for**

**NITKART-Buy and Sell at NITK**

**Version 1.0 approved**

**National Institute Of Technology Karnataka, Surathkal**

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## Revision History

Name	Date	Reason For Changes	Version
-	-	-	-

# 1. Introduction

## 1.1 Purpose

The SRS will provide a detailed description of the requirements for NITKART-Buy and Sell App at NITK. This SRS will allow for a complete understanding of what is to be expected from the newly introduced system which is to be constructed. The clear understanding of the system and its functionality will allow for the correct software to be developed for the end user and will be used for the development of the further stages of the project.

## 1.2 Document Conventions

The document is prepared using Google Docs and has used the font type 'Times New Roman'. The font size that has been used to type this document is 14pt for the headings and 11pt for the corresponding body. Standard IEEE template is the template used to recognize the appearance of the document and its flow.

## 1.3 Intended Audience and Reading Suggestions

This document is made by keeping in mind different types of readers. This document will be useful for different audience in various ways.

Audience	Use
Developers	They will use this document as a guidance for design and implementation phase.
Managers	They will see all the constraints are covered properly. Time and cost is within limits or not.
Marketing Staff	They can use this document to make advertisements for this android app because by reading this document they will know what the system will do? How this system is different from others.
User	By reading the SRS they can ensure whether their needs are being met by the App or not.
Testers	They will test the implementation of the project according to the SRS base.

Documentation Writer	They will use this document during the documentation of the project.
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## 1.4 Product Scope

- The System developed will enable the users(residents of NITK) to buy and sell commodities in NITK Surathkal. It may be Electronic items, Household items, Books, Cycle, etc. Since everyone is leading a busy life, time means a lot to everyone. It requires lot of time to travel to a particular shop to buy the goods or sell their products.

## 1.5 References

- IEEE. IEEE Std. 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

## 2. Overall Description

### 2.1 Product Perspective

The NITKART - Buy and Sell at NITK project is a new, self-contained product intended for use on the Android platform. NITKART App enables us to access information related to the products posted by the users. Exchange of commodities in NITK can be eased in a systematic way through the App.

Users can buy and sell goods or products online just by visiting the app. The seller has to post the advertisement by attaching description of the product(including the pics) and his/her details. The buyer can get the contact details(of the seller) if he/she is interested in buying the product. Hence both the parties have to mutually agree with the cost of the product and the time of the meeting (either to view or buy the product).

### 2.2 Product Functions

- Serves static data related to the users.
- Serves up to date dynamic data related to the products.

### 2.3 User Classes and Characteristics

User	Characteristics
System Admin	It will be the system administrator. He will maintain the overall App.
Buyers	It includes the users who seek for products.
Sellers	It includes the users who sell the products.

## **2.4 Operating Environment**

NITKART is a software application, which will be limited to the Google's Android Mobile operating System. The application is not resource- or graphics-intensive, so there are no practical hardware constraints. The app will rely on several functionalities built into Google's API, so ensuring appropriate usage of the API will be a major concern.

## **2.5 Design and Implementation Constraints**

The primary design constraint is the mobile platform. Since the application is designated for mobile handsets, limited screen size and resolution will be a major design consideration. Creating a user interface which is both effective and easily navigable will pose a difficult challenge. Other constraints such as limited memory and processing power are also worth considering.

## **2.6 User Documentation**

- A brochure will be provided describing the functionality of the App.

## **2.7 Assumptions and Dependencies**

- The Admin will provide the APIs to get information about buying and selling of products at NITK.
- The project requires a host and server, google play store developer account to publish the app.
- The server should support given software dependencies.

### **3. External Interface Requirements**

#### **3.1 User Interfaces**

- The Mobile Application will have a intuitive and clean home interface following Google's Material Design.
- Mobile App will also have different fragments for Buy, Sell and User profile. We propose for the app to have minimal yet sleek UI with home page highlighting important information about the products.
- Below are some representational pictures for the Mobile App UI.....

## **3.2 Hardware Interfaces**

- The Android Application will be compatible with devices having version 6.0 Marshmallow or later.
- Wearable devices will not be supported with this application.

## **3.3 Software Interfaces**

- We propose to use of Django Rest-API for fetching the product and user information.
- For designing Android App we will be using Java as our preferred language for development.
- Most of the softwares used will be Open Source.

## **3.4 Communications Interfaces**

The Communication Network must have:

- Fast and reliable network medium.
- Secure protocols.



### **3.5 IDE Interfaces**

- JetBrains Android Studio for Android Dev and JetBrains PyCharm for Django.