Business Management System Requirements Specification

Version 1.0

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1. Executive Summary

Project Overview

Business Management Systems (BMS) are great in theory. They offer you the tools and strategies to document your business processes and define the way you work. They are a standard method to achieve consistency and quality in everything you do.
After all, a Business Management System is only valuable if it is easy to use, helpful and recognizable as 'the way your company does things'.
The aim of a BMS should be to place your business processes front and center in the mind of your workforce.
It should be the Quality System that ensures everyone in your company sees how you do things and why.

The problems that this management system will solve are:

● The management of employees in a more accurate and easy way.

 ● The management of the warehouse and inventory by the service staff.

● The possibility of managing all the systems of the factory by the managers.

● A user-friendly app that allows anyone to communicate and use it without difficulties.

Purpose and Scope of this Specification

The purpose of our application is to facilitate the way a business works in Albania. Although we are in 2022, many records are being stored manually on paper, which makes the data unsafe, and very difficult to process. There is a lot actual functional digital management system to help them manage the staff updates, bills and inventory but not all of them can specifically perform some tasks which are really important for that kind of company. Since they cannot use 2-3 apps for performing different tasks because it is really confusing and requires a lot of time and effort, we built that app to make everything easier.

Product/Service Description

Nowadays many businesses in our country face many difficulties in managing the employees, important information and inventory. This is where BMS comes to help.

Product Context

This project will help manage the important tasks of a detergent and cleaning products factory in Durres. It is not dependent on any other platform or system.

User Characteristics

There are four types of users - the manager, the economist, inventory staff, and transport (drivers) - each with their own access level and privileges:

1. Manager

 ● Add, remove employees

● Check, verify, and update employee information

● Access to expenditures, profit, and financial balance

● Create and manage inventory

● Public relation

2. Economist

● Check, verify, and update balance information.

● Edit and analyze profit, and financial balance

● Create and manage reports of their work on different offers.

3. Inventory

● Create products in the inventory.

● Check, verify, and update the values of their quantity.

● Create reports of products that get sold their quantity and details.

4. Transport

● Does not have access to management system

● Can receive notifications up to 12 hours before department.

● Can check for availability of automobiles.

● Can find information about the engine status and its weight.

Assumptions

● It is assumed that each user has Internet access in order to have access to the web application

● It is assumed that each employee is able to use the Internet and Business Management System effectively and efficiently.

Constraints

Every employee that is a user of the system must have a phone or computer that can be connected to the Internet.

Dependencies

This product will require regular updating of news content in order to execute all the required features. The requirement for the balance feature that should be updated in case of other changes to program features.

2. Requirements

2.1   Functional Requirements

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_LR_01	The system should allow only logged in users to have access to its interface	Required fields are only username and password		20/04/2022	Ari Gjerazi
BR_LR_02	The system gives the option for users to sign up	Required fields are email, phone number, name and surname,salary,work hours, working position and address.		20/04/2022	Ari Gjerazi
BR_LR_03	The system lets the logged in user view their home page.	Every logged in user can view the home page that contains notifications and announcements.		20/04/2022	Ari Gjerazi
BR_LR_04	The system allows users to go to their personal page based on their role.	Role can be Finance Inventory or Delivery.		20/04/2022	Ari Gjerazi
BR_LR_05	The system notifies the employee on their personal page for extra tasks or information.	The employee receives a notification on their page.		20/04/2022	Ari Gjerazi
BR_LR_06	The system allows the admin to see the registered users and their roles	The database creates a list of all the registered users and their roles. This list is then shown to the admins of the web		20/04/2022	Ari Gjerazi
BR_LR_07	The system allows the inventory employees to update values on the products based on sell reports.	The database updates the list of all the registered products and their quantity.		20/04/2022	Ari Gjerazi
BR_LR_08	The system creates a database with all the products that have been registered and their attributes.	A database will be made with all the information regarding every product.		20/04/2022	Ari Gjerazi

Non-Functional Requirements

User Interface Requirements
General UI requirements:

☐ The user interface should be flexible for different screen sizes since the product will be aimed to be used as a web application.

☐ The fonts used will only be of sans-serif font family to ensure professionalism.

☐ Each page will have a navigation bar with tabs for each type of user.

☐ The general first page will show general information about the company, also about the page and a login/signup page for users.

☐ The login and signup pages will be easy and understandable. The signup page will require the user to fill in their information shown on the diagrams. The login page will require the user to fill in their email and password.

Usability

The product should be easy to learn and work with.

The focus should be to make it easy to understand even for non-tech professors. A manual should be created to be handed to all types of users so they can learn the major functionalities of the web application.

Errors should be handled with friendly warnings for the end users to make the user experience satisfactory.

On the other hand, risky operations such as updates or deletion of records should be handled with explanatory prompts for the users so they know the impact they are making.

Performance

o Latency from the website will be less than 0.1s.

o The server should be able to handle around 2000 users using it simultaneously.

o An average traffic would be around 100 students/hour.

o System should support a number of transactions of 10/sec.

Capacity

Include measurable capacity requirements (e.g., the number of simultaneous users to be supported, the maximum simultaneous user load, per-user memory requirements, expected application throughput)

Availability

☐ The system will be running 24/7 since the material should be accessable for the employees and the admin at any time.

☐ The product will have a tolerance of 30 minutes of down time a week, typically at weekends when traffic on the website is reduced.

☐ It is intended to be used in any geographical area of the Balkan.

Latency

Include explicit latency requirements, e.g., the maximum acceptable time (or average time) for a service request.

Manageability/Maintainability

Monitoring

Include any requirements for product or service health monitoring, failure conditions, error detection, logging, and correction.

Maintenance

Maintenance should be scheduled during summer break since employees will not be using it during that time.

Network and Hardware Interfaces

The product shall be able to operate on any device, such as laptop/PC or mobile, so long as Internet Connection is provided. The website can be easily accessed at any time and space. Provided that you are still logged into your personal account, you can be alerted of any new posts or important information through the notification pop-up on your screen.

Security

The system will provide an appropriate security level for users through encryption. The passwords saved in the database will be hashed in PHP, which will exclude even admins in accessing them. Other security methods will be provided with SQL Injection, Cross-Side Scripting and HTTPS and TLS protocols.

Protection

☐ Encryption: Passwords saved in the database will be hashed using password_hash() function in PHP. This will make sure even administrators don't have access to password of users.
☐ SQL Injection: Using PDO library, SQL statements are safe from SQL injection.
☐ Cross-Side Scripting: Input from user will be put through htmlentities() to protect the site from Cross-Side Scripting.
☐ HTTPS and TLS protocols: Communication channels of our product will use HTTPS and TLS for data encryption and data safety.

3. User Scenarios/Use Cases

4.1 User Scenarios

GUEST SCENARIOS

1. Scenario title: Successful user log-in

a. The user opens Solid Group Log in page in order to get logged in to the system.
b. At the login page, he is prompted to enter his email and his password. After entering his credentials correctly, he clicks the Login button.
c. The Login is successful and the user now is logged in to the system and ready to use it.

Log In/Sign Up page.
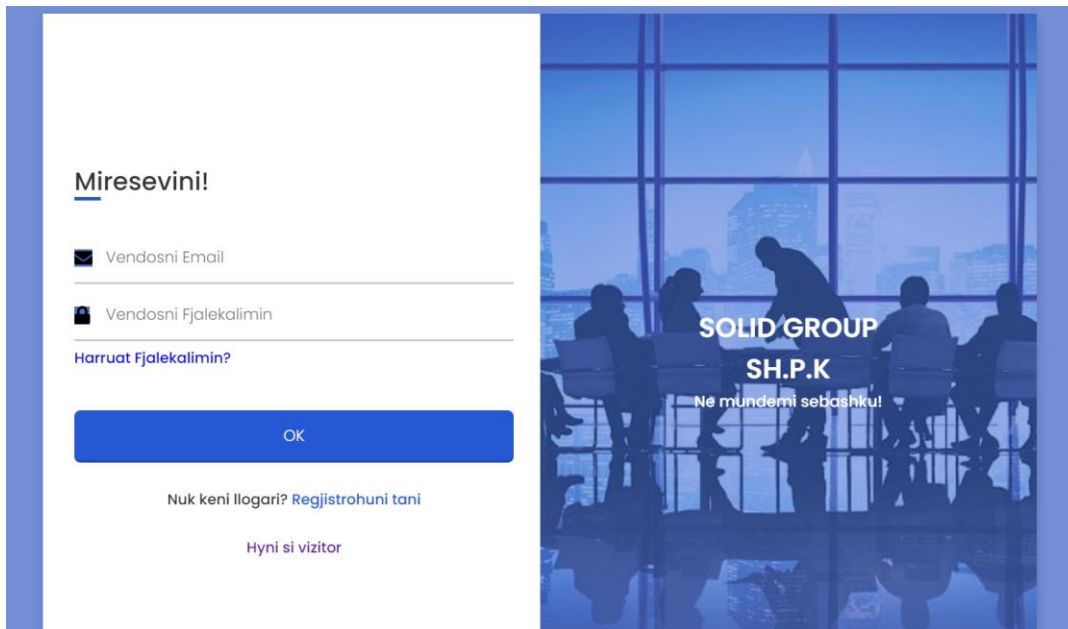
2.Scenario title: Visit as guest

 a. The user opens Solid Group Log in page in order to get logged in to the system.

 b. At the login page, there is a link that redirects user to Solid Group Home Page.

c. After clicking the link Home Page pops-up.

If the instructions are followed the user can be able to be redirected here.

News Panel

Lajme te rendesishme rreth kompanise:

TRANSAKSIONE THESARI

Transaksione Thesari eshte nje sherbim qe ofrohet nga organizata AIS me qellim informim, transparence, monitorim dhe llogaridhenie per taksapaguesit.Sherbimi u jep mundesi qytetareve te mesojne si shpenzojne Institucionet Publike parate e tyre.Te dhenat kane burim paresor Sistemin e Shpenzimeve te Zyres Qendrore te Thesarit.Informacioni i ofruar nga AIS permes dy portaleve Spending Data Albania dhe Open Data Albania liston cdo pagese, transaksion thesari te realizuar nga 1895 institucione buxhetore ne vend. Te dhenat jane te plota nga data janar 2012 deri ne ditet aktuale. Databaza perditesohet cdo jave. Te dhenat mund te aksesohen, perdoren dhe riperdoren nga kushdo. Filtrat e kerkimit mundesojne informacion sipas dates, institucionit, klientit perfitues, kategorise se shpenzimit, fashave per vlera transaksioni dhe kerkimit me fjale kuce.

3.Scenario title: Contact company for collaborations

a. The user opens Solid Group Log in page in order to get logged in to the system.

b. At the login page, there is a link that redirects user to Solid Group Home Page.

c. After clicking the link Home Page pops-up.

d. User clicks "Na Kontaktoni" in the navigation bar and it redirects user to the contact form.

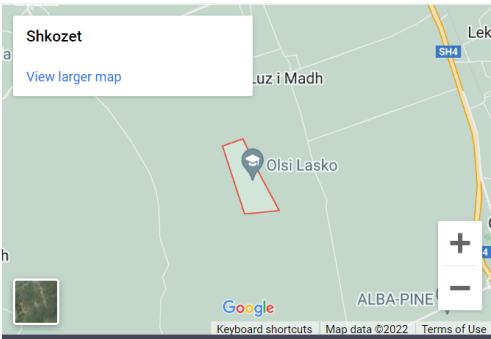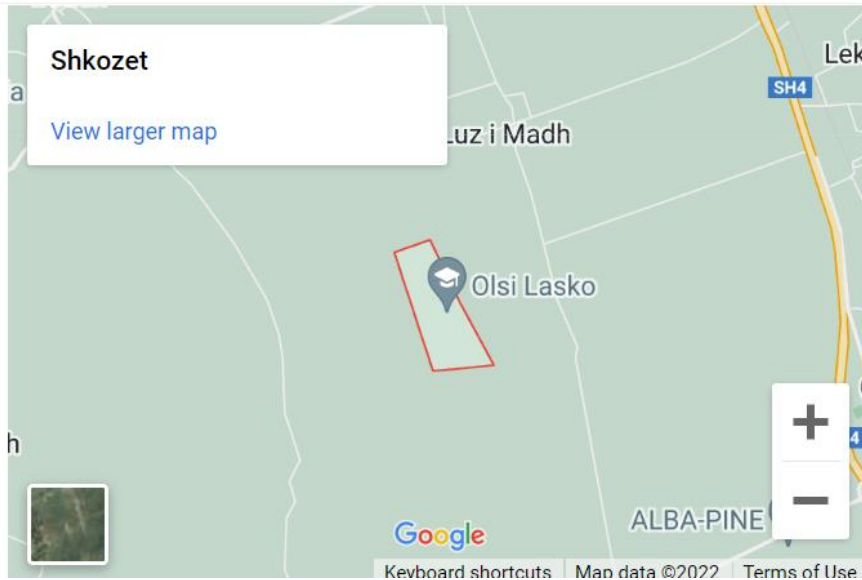e. User fills up the needed information like Name and Message.

4.Scenario title: View Solid Group Location

a. After visiting the Home Page. User clicks "Na Kontaktoni" on the navigation bar.

b. This button redirects user to the end of the page where there is a segment of the map.

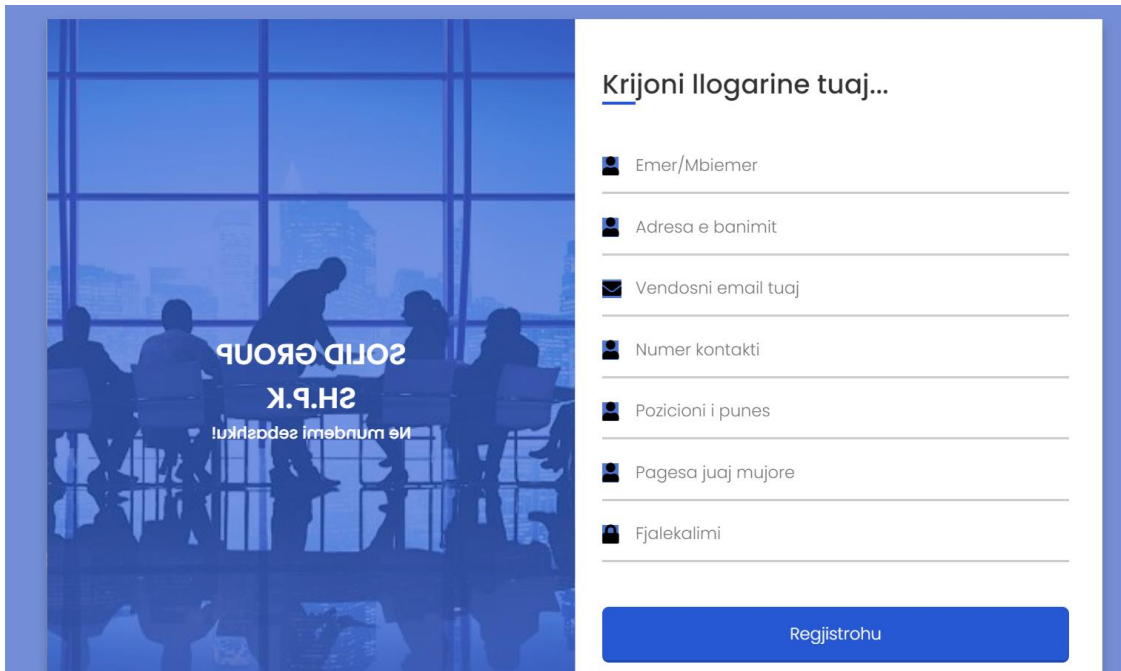c. User clicks the map and this redirects user to google maps website.

EMPLOYEE SCENARIOS

5.Scenario Title: Log in as employee

a. The user visited log in page of Solid Group and clicks on the email field and password.

b. User fills up the fields and clicks log in.

c.If the authentication is correct than it redirects user at the home page.

6.Scenario title: Sign up as employee

a. User visits log in page of Solid Group.

b.If user does not have an account than should click "Regjistrohuni tani"

c. User fills up all the necessary information to sign up and clicks "Regjistrohu"

d. User loges in.

7.Scenario title: Visit personal page

a. After log in user is redirected to Home page where there is a button Personal Page.

b.User clicks button personal page and it is redirected to his page.

FINANCE SCENARIOS

8.Scenario title: Visit finance worker page.

a. After logging in and redirecting to the personal page.

b.Personal page contains welcoming content and a panel where you can choose.

financasolidgroup@gmail.com

Departamenti i Finances

Financa përfshin veprimtarin afariste që merret me para apo në të gatshme. Financat e kanë zanafillën e paraqitjes së prodhimit të marrëdhënieve të mallit apo të marrëdhënie mall-para. Nocioni "Financa" në tërësi përfshin të gjitha marrëdhëniet monetare apo ndryshme të gjitha transaksionet që shprehet në

9.Scenario title: Create Finance Report

a.In the end of the personal page there is a button user clicks to create a finance report.

b.Users fills all the needed information to create the report and clicks submit.

Raporti Financiar

Krijoni raporte financiare vetem me nje klikim pa pasur nevoj per letra te teperta. Nje menyre e shpejte dhe inovative per te ruajtur te dhenat tuaja te rendesishme.

KRIJO RAPORT FINANCIAR

INVENTORY SCENARIOS

10.Scenario title: Visit inventory worker page.

a. After logging in and redirecting to the personal page.

b.Personal page contains welcoming content and a panel where you can choose.

11. Scenario title: Create Product

a. In the end of the personal page there is a button user clicks to create a product.

b. Users fills all the needed information to create the product and clicks add.

12.Scenario title: Create Sell Report

a.In the end of the personal page there is a button user clicks to create a sell report.

b.Users fills all the needed information to create the sell report and click submit.

Krijo nje raport shitje

─Detajet e produktit────────────────────────────

Numri identifikues i produktit ID [   ]   Sasia e produktit te shitur [   ]

Cmimi [   ]

─Detajet e transaksionit────────────────────────

Numri identifikues i transaksionit [   ]

Data e transaksionit [∨] [∨] [   ]

[**Raporto**]

DELIVERY SCENARIOS

13.Scenario title: Visit delivery worker page.

a. After logging in and redirecting to the personal page.

b.Personal page contains welcoming content and a panel where you can choose.

14.Scenario title: Choose Automobile.

a.In the end of the personal page there is a button user clicks to choose automobile.

b.User chooses by putting a tick on the box near the automobile name and plate.

MANAGER SCENARIOS

15.Scenario title: Visit delivery worker page.

a. After logging in and redirecting to the personal page.

b.Personal page contains welcoming content and a panel where you can choose function.

16.Scenario title: Create Managerial Report

a.In the end of the personal page there is a button user clicks to create an analytic report.
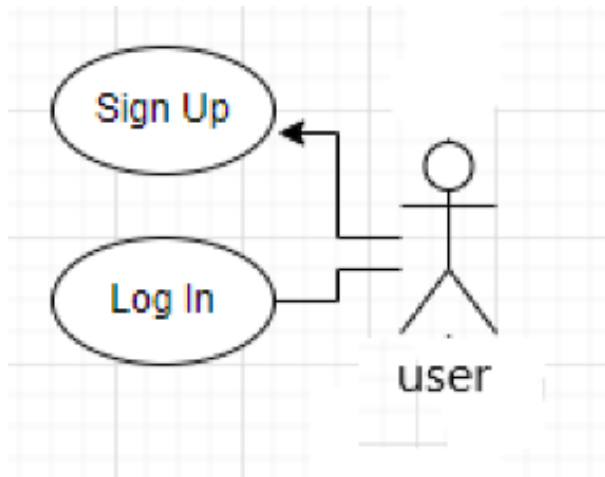
b.Users fills all the needed information to create the analytic report and clicks submit.

4.2 Use Cases

4.2.1 This is a general Use Case Diagram
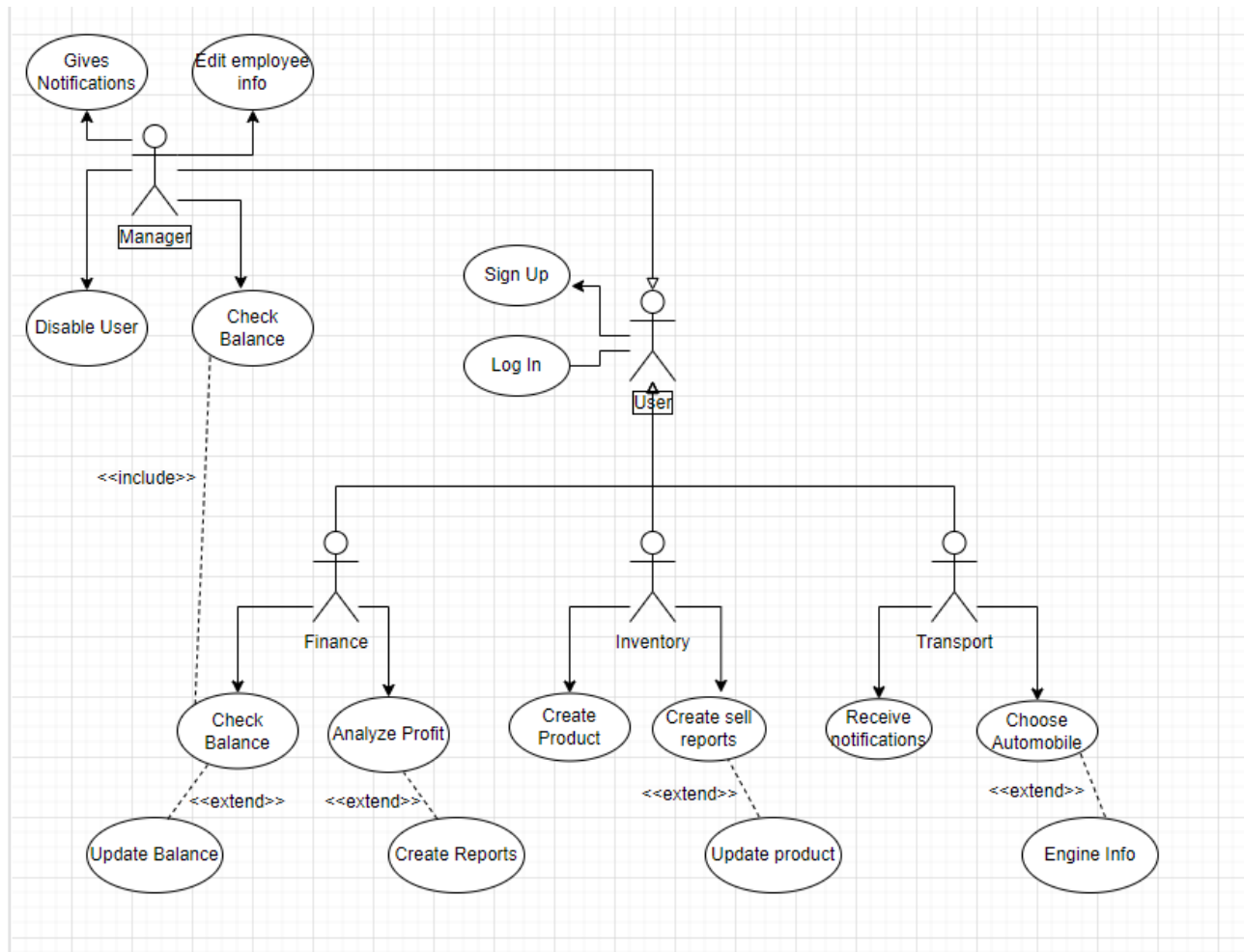
4.2.2 This is a generalized user use case

4.2.3 Guest Use Cases
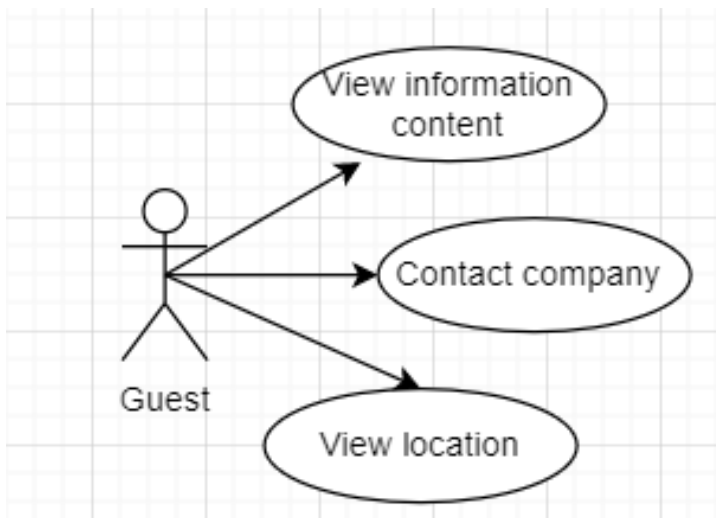
4.2.4 Finance Use Cases
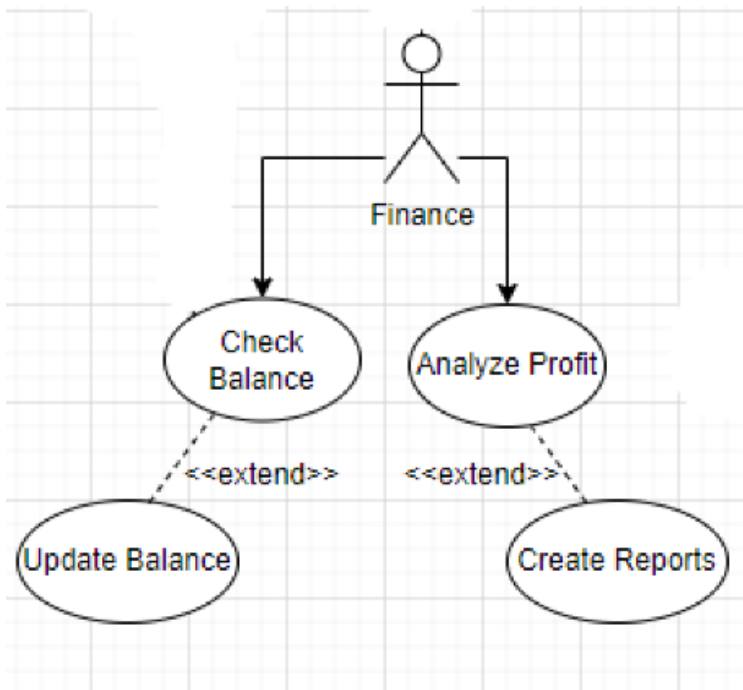
4.2.5 Inventory Use Cases
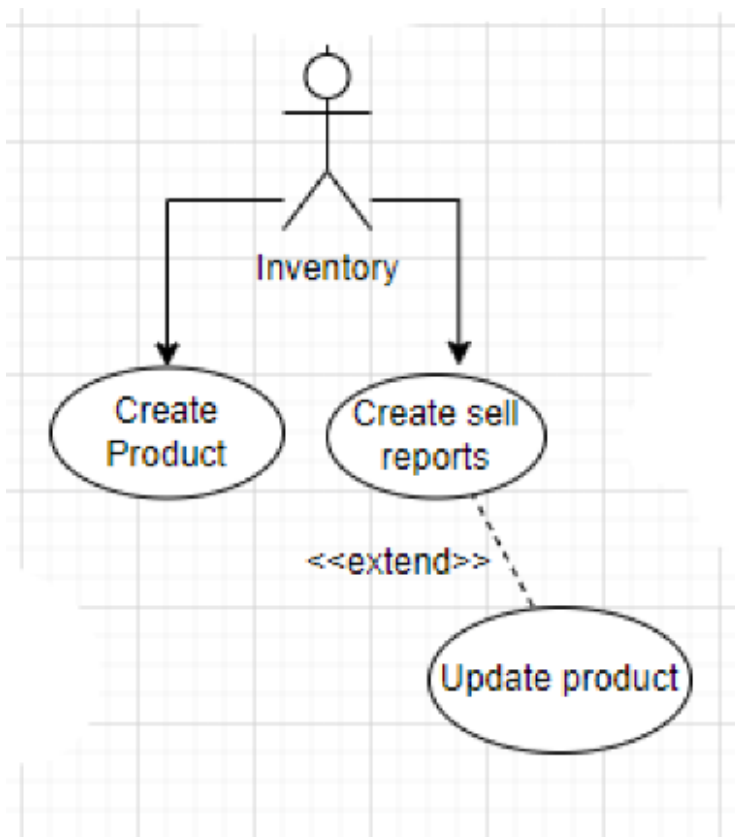
4.2.6 Delivery Use Cases
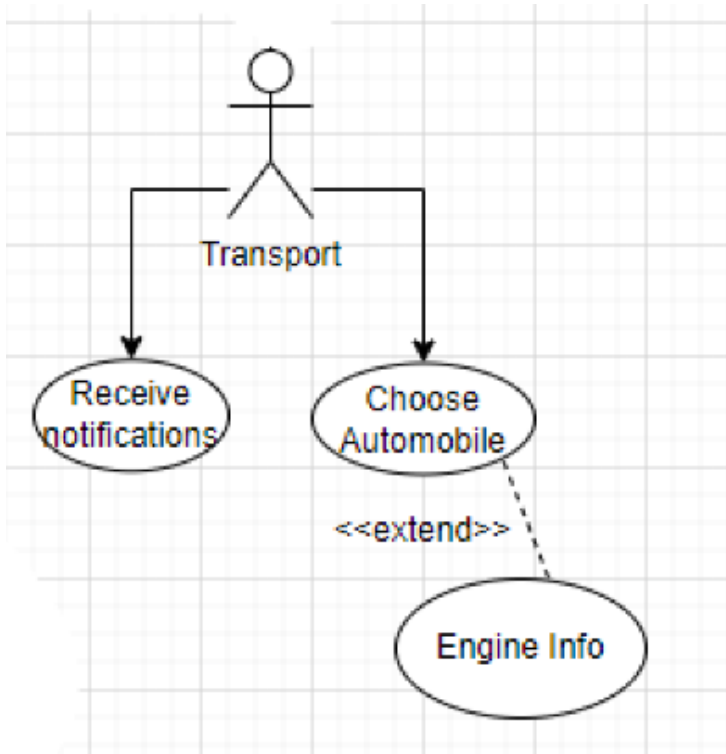
4.3 Use Cases Table (Extended)

U.C1.1	Login
Summary	Each user will be able to login into the system by entering their respective credentials.
Dependency	-
Actors	Guest, Finance, Inventory, Transport
Preconditions	The user must have a valid account, where the Employes can easily sign up,
Description of the main sequence.	Each user will be able to log in by entering their credentials if they already have a valid account.

Description of the alternate sequence	In the other case, where a user does not have a valid account, he (employee) can sign up by entering some required credentials.
Non-functional requirements	The password will be hashed and cannot be seen by any person.
Postconditions	The Information about this user will be updated.

U.C1.2	View Home Page
Summary	Each Guest or Logged in user will have the opportunity to visit home page.
Dependency	**-**
Actors	Guest, Employee, Manager
Preconditions	User must have established internet connection. Users must have visited Solid Group Page.
Description of the main sequence.	Users can view informative content, news about the company, and sources of contact.
Description of the alternate sequence	There may not be news at the moment and the user will see an empty news panel.

Non-functional requirements	To meet the usability requirements the user will be able to use the product everywhere PC, Mobile Phone, Laptop etc.
Postconditions	If personal page button is clicked user will be redirected to log in page in case it was a guest.

U.C1.3	Contact Company
Summary	Each user will be able to use the contact function to create a connection to the company.
Dependency	**-**
Actors	Guest
Preconditions	User must have been redirected to Home Page
Description of the main sequence.	After clicking "Na Kontaktoni" on the navigation bar window will slide down at the contact form user can fill.
Description of the alternate sequence	User may slide by itself and reach the end of the page where he can contact by filling the form.
Non-functional	This message is personal and will not be viewed by any other user that visits the home page.

requireme nts	
Postcondit ions	User must be redirected to home page.

U.C1.4	Open Personal Page
Summary	Each logged in user is able to open their personal page.
Dependen cy	Home Page
Actors	Finance, Inventory, Delivery
Preconditi ons	Must have logged in to the system.
Descriptio n of the main sequence.	User must click Personal page button and will be redirected to the personal page where it will be shown some welcoming content
Descriptio n of the alternate sequence	**-**
Non- functional requireme nts	Personal page will be redirected based on the role of the user.

Postconditions	User cannot go back to home page.

U.C2.1	Create Product
Summary	Inventory users are able to create new products.
Dependency	Log in, Personal Page
Actors	Inventory
Preconditions	User must have been logged in and redirected to personal page.
Description of the main sequence.	After clicking create product button user needs to fill out needed information to proceed by creating the product.
Description of the alternate sequence	User may not want to create the product and go back to personal page.
Non-functional requirements	The product created will not show in any list but will be accessed in sell reports.
Postconditions	User can create another product after adding one.

U.C 2.2	Create Sell Report
Summary	Inventory users are able to create new sell reports.
Dependency	Log in, Personal Page
Actors	Inventory
Preconditions	User must have been logged in and redirected to personal page.
Description of the main sequence.	After clicking create sell report button user needs to fill out needed information to proceed by creating the report.
Description of the alternate sequence	User may not want to create the report and go back to personal page.
Non-functional requirements	The report created will not show in any list but will be edit later on product attributes.
Postconditions	User can create another report after adding one.

U.C 3.1	Create Analytic Report
Summary	Manager users are able to create new report.
Dependency	Log in, Personal Page
Actors	Manager
Preconditions	User must have been logged in and redirected to personal page.
Description of the main sequence.	After clicking create report button user needs to fill out needed information to proceed by creating the report.

Description of the alternate sequence	User may not want to create the report and go back to personal page.
Non-functional requirements	The report created will not show in any list but will be shown in general calculations.
Postconditions	User can create another report after adding one.

U.C 4.1	Create Finance Report
Summary	Finance users are able to create new report.
Dependency	Log in, Personal Page
Actors	Finance
Preconditions	User must have been logged in and redirected to personal page.
Description of the main sequence.	After clicking create report button user needs to fill out needed information to proceed by creating the report.
Description of the alternate sequence	User may not want to create the report and go back to personal page.
Non-functional requirements	The report created will not show in any list but will be shown in balance.
Postconditions	User can create another report after adding one.

U.C 5.1	Choose automobile
Summary	Delivery users are able to choose an automobile.
Dependency	Log in, Personal Page
Actors	Delivery
Preconditions	User must have been logged in and redirected to personal page.
Description of the main sequence.	After clicking choose automobile button user needs to tick on the boxes to proceed by choosing the automobile.
Description of the alternate sequence	User may not want to choose the automobile and go back to personal page.
Non-functional requirements	The automobile choosen will not show in any list but will be shown in case some other user decides to choose.
Postconditions	User cannot choose another automobile after choosing one.