Project Report Format

1. INTRODUCTION

1.1 Project Overview

In today's modern world , dressing with fashion has evolved from being a desire to a basic activity . It has also gained certain importance as fashion represents one's culture .Fashion also provides variety to life and it also provides opportunity in trying out something new .Wearing fashionable clothes gives happiness and also improves mood and mental well being . It also gives respect and provides us a step closer towards the personal improvement goals .

In our project , we have built an app which helps the users to find the perfect outlook and make them look amazing . As many of us find difficulty in figuring out the best combination of our dressing , this app acts as a solution for this problem . This app uses Cloud storage , docker and many more to provide the users the best combination .

1.2 Purpose

We have been said that we should not judge books by its cover, but the reality is people do judge books by its cover. Fashionable dressing gives one a unique first impression, which gives a great head start in social circles. Fashion helps in determining the balance in trends because not all that comes in the market comes under the radar of trendy .

Wearing fashionable dresses also gives you a competitive edge . In this competitive world where every aspect of an individual plays a major role in succeeding , clothes hold a major portion . The dress one wears speaks whether one is ready for the task and vibrant.

2. LITERATURE SURVEY

2.1 Existing problem

When confronted with a large number of garments, consumers are forced to try them on multiple times , which takes a lot of time and energy .
Customers can make smarter shopping decisions and discover new articles of clothes that complement on other .

Complex outfit recommendations assist vendors in selling more products which has a huge positive impact on their business.

The suggested fashion recommendation system offers a variety of online fashion businesses and web applications that allows buyers to view a collage of stylish items that look nice together .

2.2 References

I. J.McAuley , C.Targett ,Q.Shi and A.van den hengel, “Image based recommendations on styles and substitutes”,in proceedings of the International ACM Conference on Research and Development in Information retrieval,(2015)

II. Y.Hu , X.Yi , and L.S.Davis, “Collaborative Fashion recommendation approach”in Proceedings of the 23rd Annual ACM Conference on Multimedia Conference .

III. H.Li , F.Cai ,and Z.Liao,”Content based Filtering Recommendation Algorithm Using”in Proceedings of the HMM,pp.275-277,2012

IV. JJ.L.D.Thombre,D.V.Nirmal,”Human detection and tracking using image segmentation and Kalman filter “,Intelligent agent Multi agent systems,pp.1-5,2009

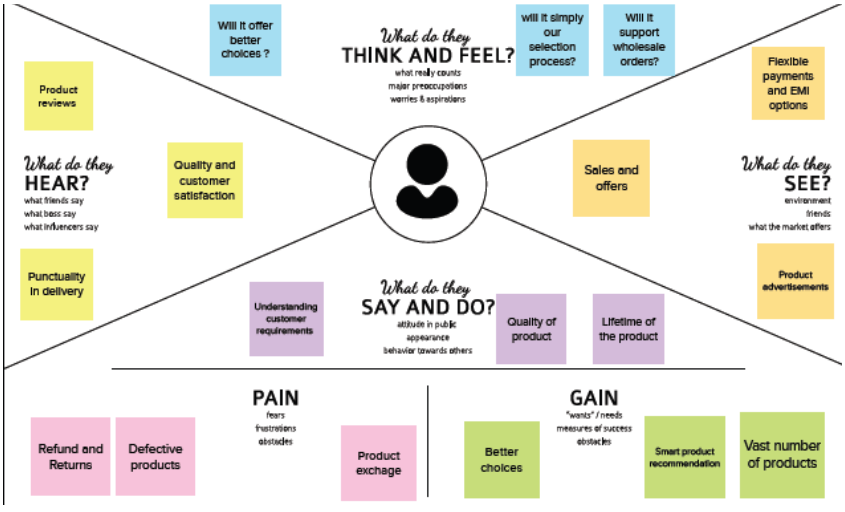
2.3 Problem Statement Definition

The traditional garment recommendation depends on manual operation.To be specific, salesman need to recommend garment to customers in order to arouse their interest in purchasing.

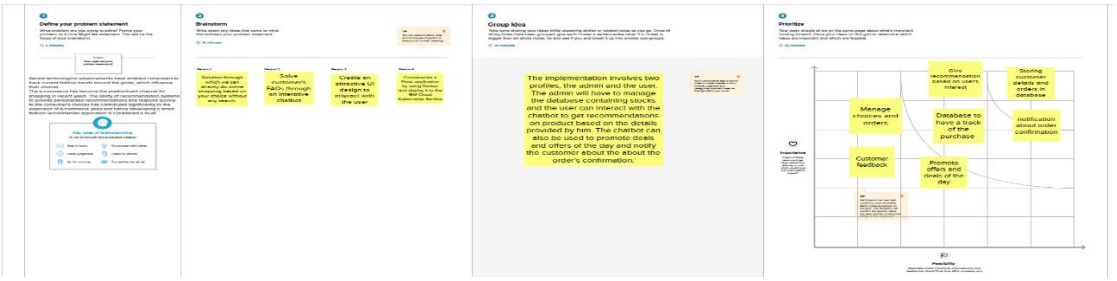
However, it is very difficult for a salesman to understand the customer’s real thoughts and then recommend the targeted garment as there is no sufficient cohesiveness .

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming



3.3 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Recommending trending fashion. Suggesting users matched fashions.
2.	Idea / Solution description	In this platform, there are numerous choices are available, an efficient recommendation system is required to sort, order, and efficiently convey relevant product content or information to users. The chatbot can give recommendations to the users based on their interests. It can promote the best deals and offers on that day.
3.	Novelty / Uniqueness	Instead of navigating to several screens for booking products online, the user can directly talk to Chatbot regarding the products. Get the recommendations based on information provided by the user. Using chatbot we can manage user's choices and orders.
4.	Social Impact / Customer Satisfaction	User can see what is on trending. User will get updated on trending and exclusive offers.
5.	Business Model (Revenue Model)	Revenue can be generated by selling the products and they can get offers on any occasions or upcoming festivals. The revenue can also be obtained by maintaining customers services when they needed, for that services it can be charged for it.
6.	Scalability of the Solution	Through this, the user can get the right fashion to the right person.

3.4 Problem Solution fit

1. CUSTOMER SEGMENT He/she is devoted follower of the latest fashion trends.	2.JOBS-TO-BE-DONE The recommendations that are generated are not accurate enough.	3.TRIGGERS Seeing their peers use an application that provides a more accurate and favored output.
4.EMOTIONS:BEFORE/AFTER BEFORE-Disappointed and dissatisfied. AFTER-Happy and satisfied.	5.AVAILABLE SOLUTIONS Going to an in-person store to look for more options instead of an online application	6.CUSTOMER CONSTRAINTS Lack of resources, low budget, transportation issue and lack of stores.
7.BEHAVIOUR DIRECTLY RELATED-Find an application that has a wider range of options or check for update in the current application to get better recommendations. INDIRECTLY ASSOCIATED-Customer visits fashion runways and exhibits frequently.	8.CHANNELS OF BEHAVIOUR ONLINE-Do research on what application works the best for their individual need for better satisfaction. OFFLINE-Goes to fashion related events to get a better understanding on fashion so that they don't need to reply on the application much.	9.PROBLEM ROOT CAUSE Customers have to keep updating with the ever growing technology where things get old or outdated easily.
10.YOUR SOLUTION Create an application with a primary goal to provide a better recommendations ie. provide many more datasets as training and testing set to get a more accurate result.		

4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	mailing a registration form signing up with Gmail
FR-2	User Confirmation	Email confirmation required Reassurance through OTP
FR-3	User Login	Use your username and password to log in.
FR-4	Personal Details	Personal information through Form Personal information using the UI Tab
FR-5	Delivery Confirmation	Email confirmation required Email confirmation required

4.2 Non-Functional requirements

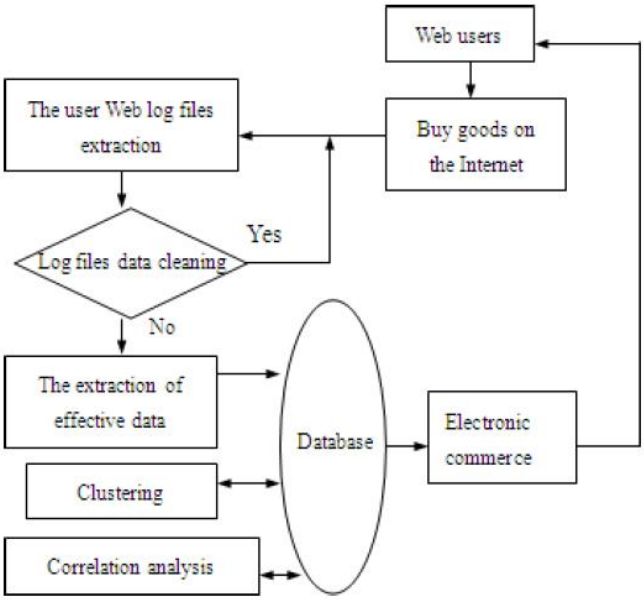
Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

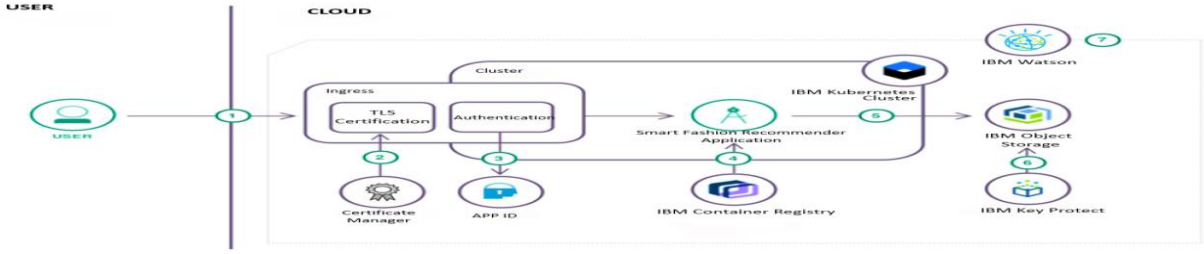
FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	User-friendliness of the program
NFR-2	**Security**	The program places the utmost importance onuser privacy. For the user, security measures are implemented
NFR-3	**Reliability**	It can accommodate over 2000 people at once. Most functions may be processed and initialised.
NFR-4	**Performance**	The program allows multitasking and can tackle complicated tasks.
NFR-5	**Availability**	It is a free website and software that runs on all operating systems.
NFR-6	**Scalability**	The user's performance will decline by 10 to 17% under heavier workloads.

5. PROJECT DESIGN

5.1 Data Flow Diagrams



5.2 Solution & Technical Architecture



5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a customer, I can sign up for the application by entering my email address, password, and password confirmation.	I can access my account.	High	Sprint-1
		USN-2	Once I have registered for the application, I will receive a confirmation email.	I can receive confirmation email	High	Sprint-1
		USN-3	As a customer, I can sign up for the application using my email address.	I can sign up and access the dashboard to use my email address.	Low	Sprint-2
		USN-4	As a customer, I can sign up for the application using my Gmail account.	I can sign up and access the dashboard to use my email address.	Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application byentering my username/email & password	I can login into the application with Gmail Login	High	Sprint-1
	Dashboard	USN-5	As a customer, I can access the application by entering my username/email address and password.	By logging into the application, I can access the Dashboard.	High	Sprint-1
Customer (Web user)	Registration	USN-1	As a customer, I can register for the website by entering my email address, password, and password confirmation.	I can access my account	High	Sprint-1
		USN-2	Once I have registered for the website, I will receive a confirmation email.	I can receive confirmation email	High	Sprint-1
		USN-3	As a customer, I can register for the website via email.	I can sign up and access the dashboard to use my email address	Low	Sprint-2
		USN-4	As a customer, I can sign up for the website using Gmail.	I can sign up and access the dashboard to use my email address	Medium	Sprint-1
	Login	USN-5	As a customer, I can access the website by entering my username/email address and password.	I can access the application using Gmail Login.	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
	Dashboard	USN-5	As a customer, I can access the Dashboard by logging into the website.	Logging into the website allows me to access the Dashboard.	High	Sprint-1
Customer Care Executive	Login	USN-1	I can log into the application as a Customer Care Executive by entering my Executive email address and password.	I can access the application using Gmail Login.	High	Sprint-1
	Dashboard	USN-1	By logging into the application as a Customer Care Executive, I can access the application's Dashboard.	By logging into the application, I can access the Dashboard.	High	Sprint-1
	Service	USN-1	As a Customer Care Executive, I can log in and access the application's Customer Service page.	I can access the Service pageby logging & accessing the page	High	Sprint-1
Administrator	Login	USN-1	As an Administrator, I can access the application by entering my Administer email address and password.	I can login into the application with Gmail Login	High	Sprint-1
	Dashboard	USN-1	By logging into the application as an Administrator, I can access the application's Dashboard.	I can access the Dashboard by logging intothe application	High	Sprint-1
	Administration & Service	USN-1	As an administrator, I can access the application's Administration and Service pages by logging in and accessing the page.	I can get to the Administration & Service page by logging in and going to the page.	High	Sprint-1

6. PROJECT PLANNING & SCHEDULING

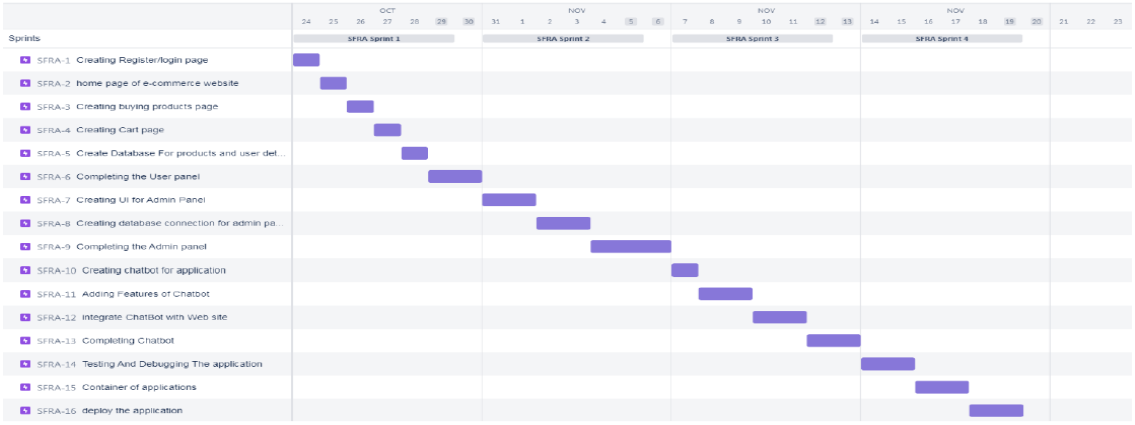
6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User Panel	USN-1	The user will login into the website and go through the products available on the website	20	High	ROOPESH R S SALMAN SAKTHIVEL J SURYA K
Sprint-2	Admin panel	USN-2	The role of the admin is to check out the database about the stock and have a track of all the things that the users are purchasing.	20	High	ROOPESH R S SALMAN SAKTHIVEL J SURYA K
Sprint-3	Chat Bot	USN-3	The user can directly talk to Chatbot regarding the products. Get the recommendations based on information provided by the user.	20	High	ROOPESH R S SALMAN SAKTHIVEL J SURYA K
Sprint-4	final delivery	USN-4	Container of applications using docker kubernetes and deployment the application. Create the documentation and final submit the application	20	High	ROOPESH R S SALMAN SAKTHIVEL J SURYA K

6.2 Sprint Delivery Schedule

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022		29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		19 Nov 2022

6.3 Reports from JIRA



7. CODING & SOLUTIONING (Explain the features added in the project along with code)

7.1 Feature 1

ABILITY TO FILTER RECOMMENDATIONS:

This application provides users the ability to filter their recommendations based on certain criteria like the cloth they want to buy. Users can also filter the recommendations based on the product cost. With these filters, users can shop easily and can save a lot of time as they can filter the things they want from the sea of goods that are available

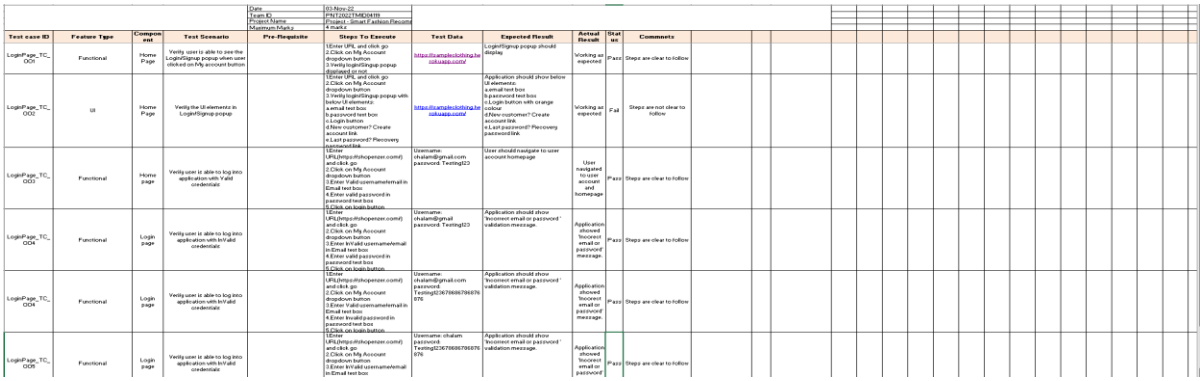
7.2 Feature 2

PERSONALIZTION:

Our application provides personalized recommendation to users. As users shop in our application, our application gets to know about the interests and likings of users. Based on the personal likings of user, our application recommends clothes to the users which makes the user to find their fashion cloth easily without any difficulty.

8. TESTING

8.1 Test Cases



				Date	03-Nov-22					
				Team ID	PNT2022TMID04119					
				Project Name	Project - Smart Fashion Recomm					
				Maximum Marks	4 marks					
Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button		1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Signup popup displayed or not	https://sampleclothing.herokuapp.com/	Login/Signup popup should display	Working as expected	Pass	Steps are clear to follow
LoginPage_TC_OO2	UI	Home Page	Verify the UI elements in Login/Signup popup		1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Signup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link e.Last password? Recovery password link	https://sampleclothing.herokuapp.com/	Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link e.Last password? Recovery password link	Working as expected	Fail	Steps are not clear to follow
LoginPage_TC_OO3	Functional	Home page	Verify user is able to log into application with Valid credentials		1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing123	User should navigate to user account homepage	User navigated to user account homepage	Pass	Steps are clear to follow
LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with InValid credentials		1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chalam@gmail password: Testing123	Application should show 'Incorrect email or password ' validation message.	Application showed 'Incorrect email or password' message.	Pass	Steps are clear to follow
LoginPage_TC_OO5	Functional	Login page	Verify user is able to log into application with InValid credentials		1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter Invalid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing12367689786876	Application should show 'Incorrect email or password ' validation message.	Application showed 'Incorrect email or password' message.	Pass	Steps are clear to follow
LoginPage_TC_OO6	Functional	Login page	Verify user is able to log into application with InValid credentials		1.Enter URL(https://shopenzer.com/) and click go 2.Click on My Account dropdown button 3.Enter InValid username/email in Email text box	Username: chalam password: Testing12367689786876	Application should show 'Incorrect email or password ' validation message.	Application showed 'Incorrect email or password'	Pass	Steps are clear to follow

8.2 User Acceptance Testing

Acceptance Testing

UAT Execution & Report Submission

Date	03 November 2022
Team ID	PNT2022TMID04119
Project Name	Project – Smart Fashion Recommender Application
Maximum Marks	4 Marks

1. *Purpose of Document*

The purpose of this document is to briefly explain the test coverage and open issues of the Smart Fashion Recommender Application project at the time of the

release to User Acceptance Testing (UAT).

2. *Defect Analysis*

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	10	4	2	3	20
Duplicate	1	0	3	0	4
External	2	2	0	1	5
Fixed	8	2	4	20	37
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	24	14	13	26	77

3. *Test Case Analysis*

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	7	0	2	5
Client Application	51	0	0	51
Security	2	0	0	2
Outsource Shipping	3	0	1	2
Exception Reporting	9	3	1	5
Final Report Output	4	0	0	4
Version Control	2	0	0	2

9. ADVANTAGES & DISADVANTAGES

ADVANTAGES :

- ✓ Increases the average order value
- ✓ Reduces workload and overhead
- ✓ Increases number of items per order
- ✓ Drives traffic smoothly

DISADVANTAGES :

- ✓ Significant investments are required
- ✓ Lack of data analytics may cause problem
- ✓ Privacy concerns as personal information of customers is needed to recommend based on their interests
- ✓ Inability to capture changes in user behaviour

10.CONCLUSION

In conclusion we can say that with this application people can shop fashionable clothes based on their interests and liking without any difficulties. With our recommendation system, users can have a hassle free shopping and find the perfect combination for their outlook including shoes.

11.FUTURE SCOPE

The Future scope of our application is to use artificial intelligence and neural networks to recommend fashionable clothes based on the user

interests. With deep learning and artificial intelligence , latent attributes can be derived with ease .

Incorporating time based recommendation will also improve the user experience and efficiency of our application. Like during season times like Christmas and Diwali , people shop more than usual and recommendation based on that particular occasion will provide more ease to the users of our application.

12.APPENDIX

Source Code

https://raw.githubusercontent.com/Himani13040/Flask-E-commerce/master/main.py

GitHub & Project Demo Link

https://github.com/IBM-EPBL/IBM-Project-21858-1659793250

PROJECT DEMO LINK :

https://github.com/IBM-EPBL/IBM-Project-21858-1659793250/tree/main/PROJECT%20REPORT/Demo%20video