Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	7 November 2023
Team ID	Team -592110
Project Name	Wholesale customer Segmentation
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project setup & Infrastructure	USN-1	By defining the objectives and using relevant customer data we setup the infrastructure for wholesale customer segmentation	1	High	Charan Sathvik
Sprint-1	Development environment	USN-2	The main focus is on data collection, we will be able to classify the groups. It will be able to customize the current marketing strategies.	2	High	Abhiram
Sprint-1	Data collection	USN-3	Gather data on customer purchases, suchas the types and quantities of products they buy over a period of time	2	High	Hanshitha

Sprint-2	data preprocessing	USN-4	Clean and preprocess the data by handlingmissing values, scaling features if necessary, and removing outliers	3	Medium	Spandana
Sprint-3	feature selection:	USN-5	Identify the relevant features for segmentation. In this case, it could be the product categories, purchase frequency, or total spending.	4	Medium	Spandana
Sprint-3	Model Building or selection	USN-6	By selecting the number of clusters (K) through methods like the elbow method or silhouette score. Then, initialize K centroids,assign each customer to the nearest centroid based on their features, and recalculate centroids by taking the mean	6	High	Abhiram
Sprint-3	Model evaluation	USN-7	Analyze these clusters to understand the purchasing patterns and characteristics of each segment.	1	Medium	Charan Sathvik
Sprint-4	Marketing strategies	USN-8	Develop specific marketing strategies for each customer segment based on their preferences and behavior	1	Low	Hanshitha

Project Tracker, Velocity & Burndown Chart:

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	3	5 Days	30 Oct 2023	3 Oct 2023	20	3 Nov 2023
Sprint-2	5	4 Days	4 Oct 2023	7 Nov 2023		
Sprint-3	10	7 Days	8 Nov 2023	14 Nov 2023		
Sprint-4	1	6 Days	15 Nov 2023	20 Nov 2023		

Velocity:

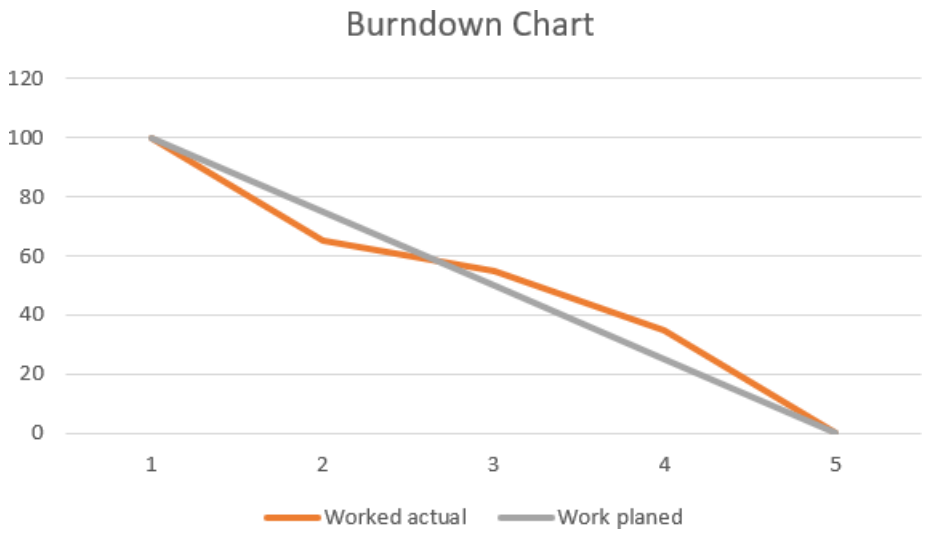
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

AV = 24/20 =1.2

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



Reference:

https://ijsrst.com/paper/8152.pdf

https://www.kaggle.com/datasets/aggle6666/wholesale-customer-segmentation-dataset/discussion

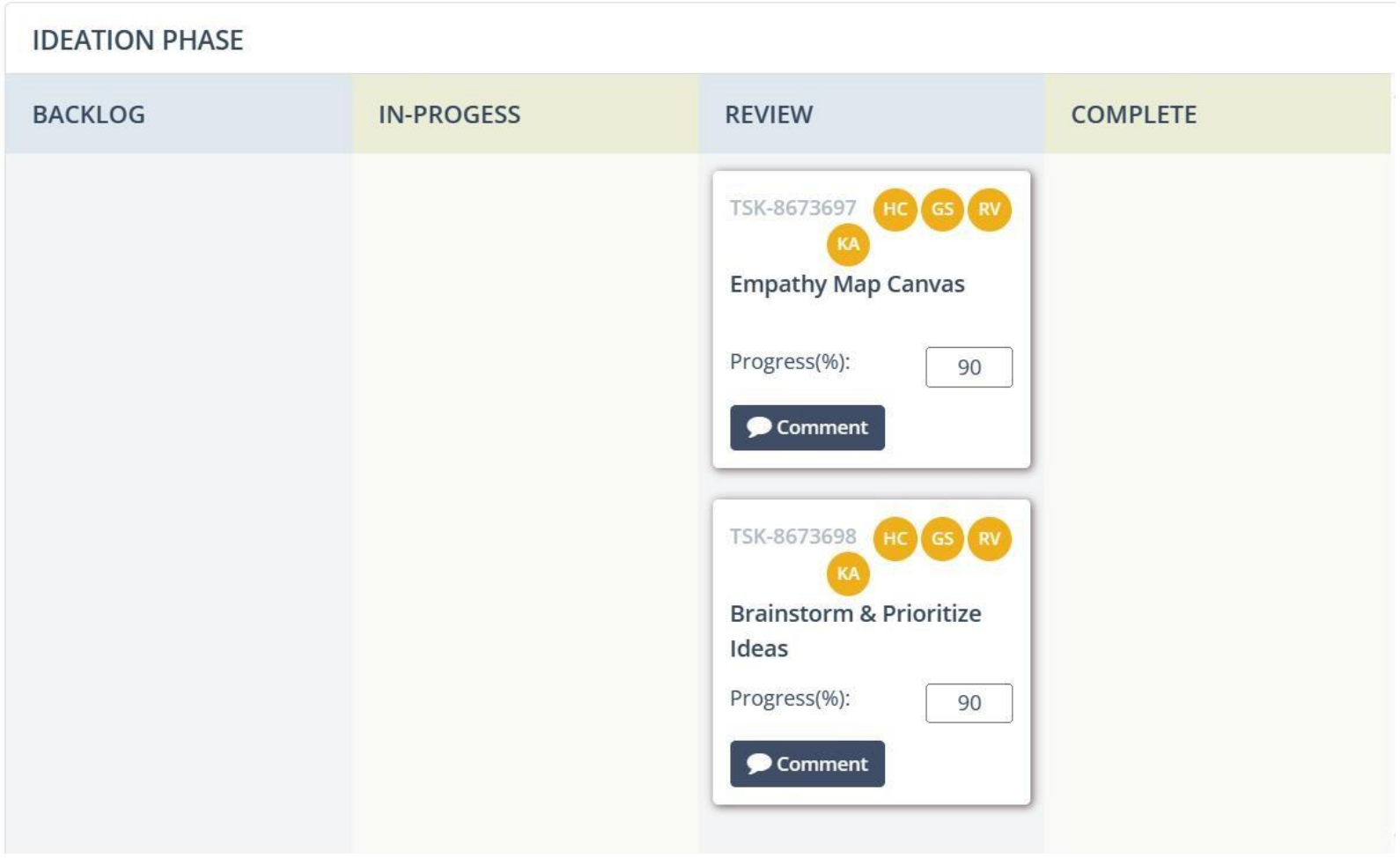
https://www.aaarl.ca/post/customer-segmentation-for-wholesalers

https://rpubs.com/NikRoy/778968

https://www.researchgate.net/profile/Mehnaz-Tabassum/publication/323771551_Comparative_Performance_Of_Using_PCA_With_K-Means_And_Fuzzy_C_Means_Clustering_For_Customer_Segmentation/links/5aa9f8680f7e9b88266f6e35/Comparative-Performance-Of-Using-PCA-With-K-Means-And-Fuzzy-C-Means-Clustering-For-Customer-Segmentation.pdf

Board section:

We have completed sprint 1 and 2. So we can see the remaining tasks on board.



PROJECT DESIGN PHASE

BACKLOG	IN-PROGESS	REVIEW	COMPLETE
		TSK-8673699 HC GS RV KA Proposed Solution Progress(%): 90 Comment	
		TSK-8673700 HC GS RV KA Solution Architecture Progress(%): 90 Comment	

PROJECT DESIGN PHASE

TSK-8673700 HC GS RV KA

Solution Architecture

Progress(%): 90

Comment

TSK-8673701 HC GS RV KA

Determine The Requirements (Data Flow Diagram)

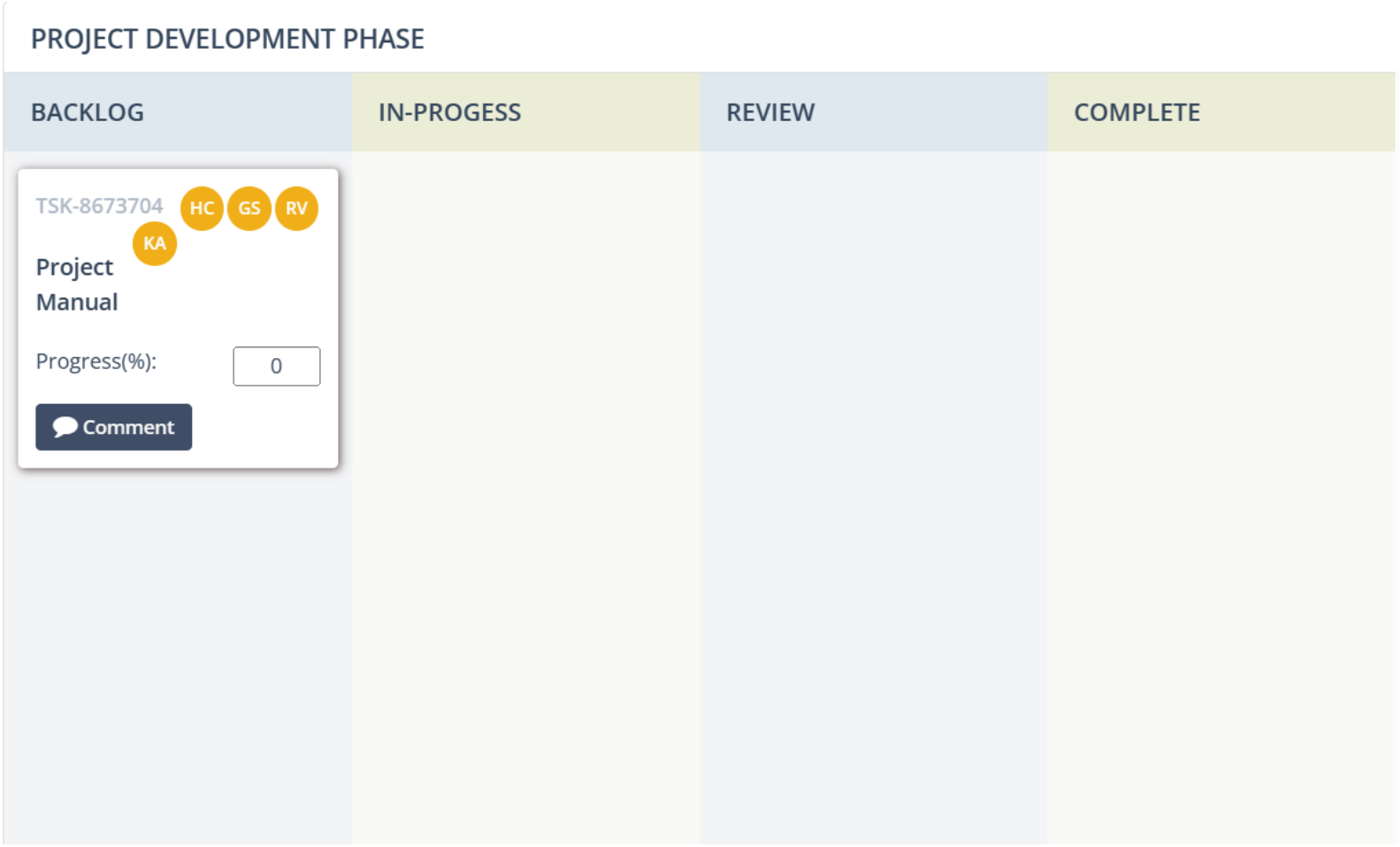
Progress(%): 90

Comment

PROJECT PLANNING PHASE

BACKLOG	IN-PROGESS	REVIEW	COMPLETE
	TSK-8673702 HC GS RV KA **Technology Stack** Progress(%): 50 Comment		
	TSK-8673703 HC GS RV KA **Project Planning Details** Progress(%): 50 Comment		

Backlog section



PERFORMANCE & FINAL SUBMISSION PHASE

BACKLOG	IN-PROGESS	REVIEW	COMPLETE
TSK-8673705 HC GS RV KA **Solution Performance** Progress(%): 0 Comment			
TSK-8673706 HC GS RV KA **Project Documenation** Progress(%): 0 Comment			