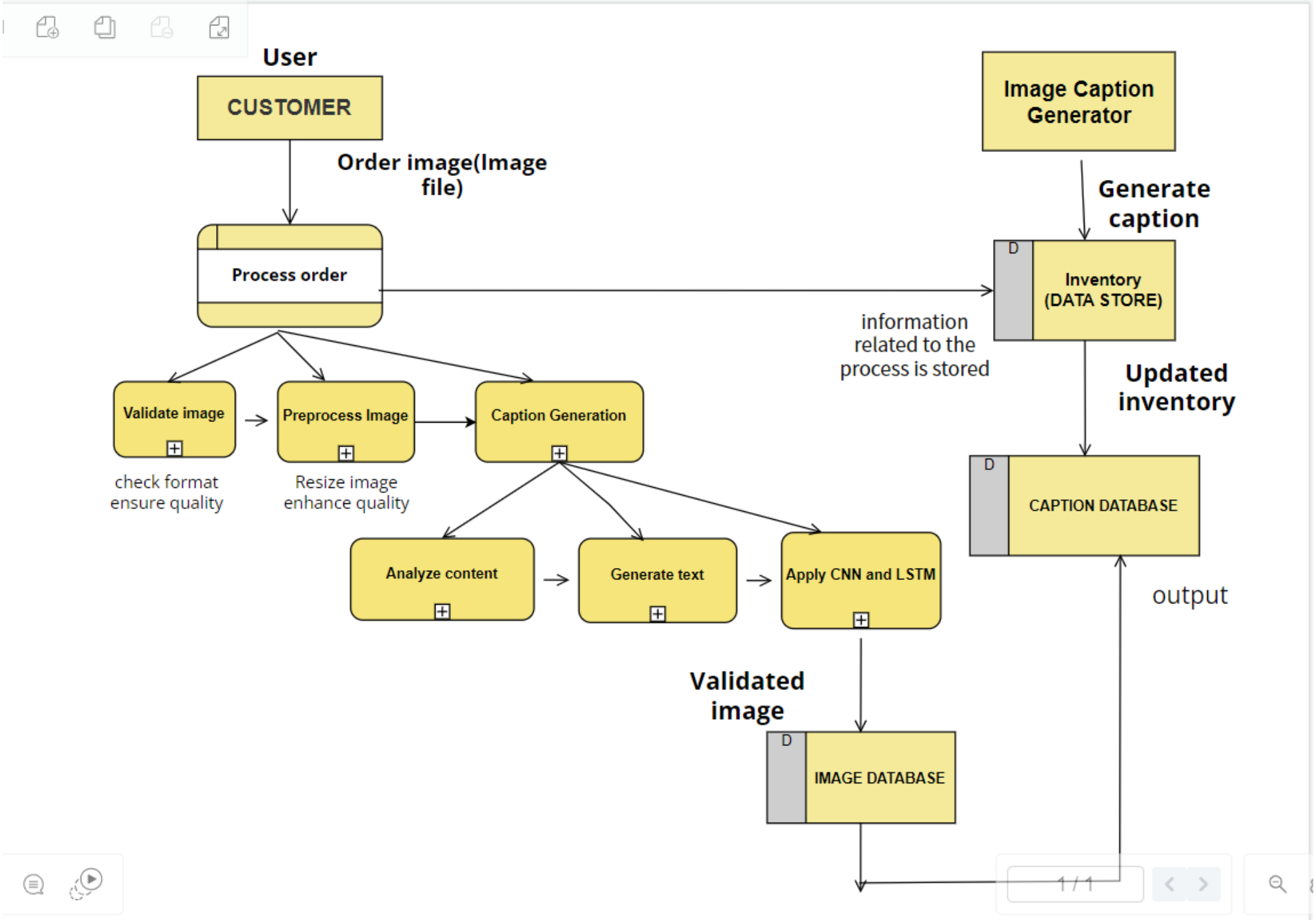
Project Design Phase-II
Data Flow Diagram & User Stories

Date	01-11-2023
Team ID	**Team-591719**
Project Name	Project -Image Caption Generation
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) for an **Image Caption Generator** depicts the flow of data within the system, illustrating how images are processed and transformed into captions. It visually represents the interactions between external entities (users), processes (image validation, preprocessing, and caption generation), and data stores (image and caption databases) in the system.


User
CUSTOMER
Order image(Image file)
Process order
Image Caption Generator
Generate caption
D
Inventory (DATA STORE)
information related to the process is stored
Updated inventory
Validate image
Preprocess Image
Caption Generation
check format ensure quality
Resize image enhance quality
D
CAPTION DATABASE
Analyze content
Generate text
Apply CNN and LSTM
output
Validated image
D
IMAGE DATABASE

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Content Creator (Photographer)	Image Upload	USN-1	As a content creator, I want to upload multiple images at once to save time and streamline the captioning process.	I can select and upload multiple images through a user-friendly interface.	High	Sprint-1
	Custom Keywords	USN-2	As a content creator,I want to Input custom keywords during caption generation so that the Model incorporates keywords for more personalized captions.	I receive Shared images and retained captions with enhanced custom keywords.	Medium	Sprint-2
Casual User (Mobile)	Caption Generation	USN-3	As a casual user, I want to effortlessly generate captions for my photos with a simple mobile-friendly interface.	I receive creative and relevant captions for each uploaded image.	High	Sprint-2
	Emoji-powered Caption Generation	USN-4	As a casual user, I want to add emojis to generated captions for a more expressive output.	I receive creative and emoji-enriched captions for each uploaded image.	Medium	Sprint-3
Administrator	User Management (Epic)	USN-5	As an administrator, I want to manage user accounts and roles, ensuring a secure and organized platform.	I can modify,add or remove user accounts, assign roles and ensure	High	Sprint-1

				user data security.		
Everyday User	Share Captions	USN-6	As an Everyday User,I want to Enable easy sharing of captioned images through messaging or social media.	I can share captions through social media.	Low	Sprint-4
	Mood-based Captions	USN-7	As an Everyday User,I want a mood selection option during caption generation.Generated captions should align with the chosen mood or emotion.	I receive creative mood-based captions.	Medium	Sprint-4
Social Media Manager	Seamless Social Media Integration	USN-8	As a social media manager, I want seamless integration with popular social media platforms for efficient content sharing.	I can directly share generated captions to social media platforms without additional steps.	Medium	Sprint-5
AI Enthusiast	Advanced Caption Settings Exploration	USN-9	As an AI enthusiast I want to fine-tune advanced settings for the caption generation model, exploring the depths of customization.	I can adjust parameters such as style, tone, and language to tailor the caption output to my preferences.	High	Sprint-5
Accessibility User (Web)	Accessible Image Caption Generator	USN-10	As an Accessibility User, I need the image caption generator to be accessible and usable with screen readers and other assistive technologies.	I can see that the image caption generator complies with accessibility standards, allowing smooth usage for users with disabilities.	High	Sprint-5