

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	31 Oct 2023
Team ID	NM2023TMID04450
Project Name	Building a website using Canva

Technical Architecture:

The technical architecture for a clothing brand's online presence involves a combination of hardware, software, and infrastructure to support its website, e-commerce platform, and other digital systems.

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

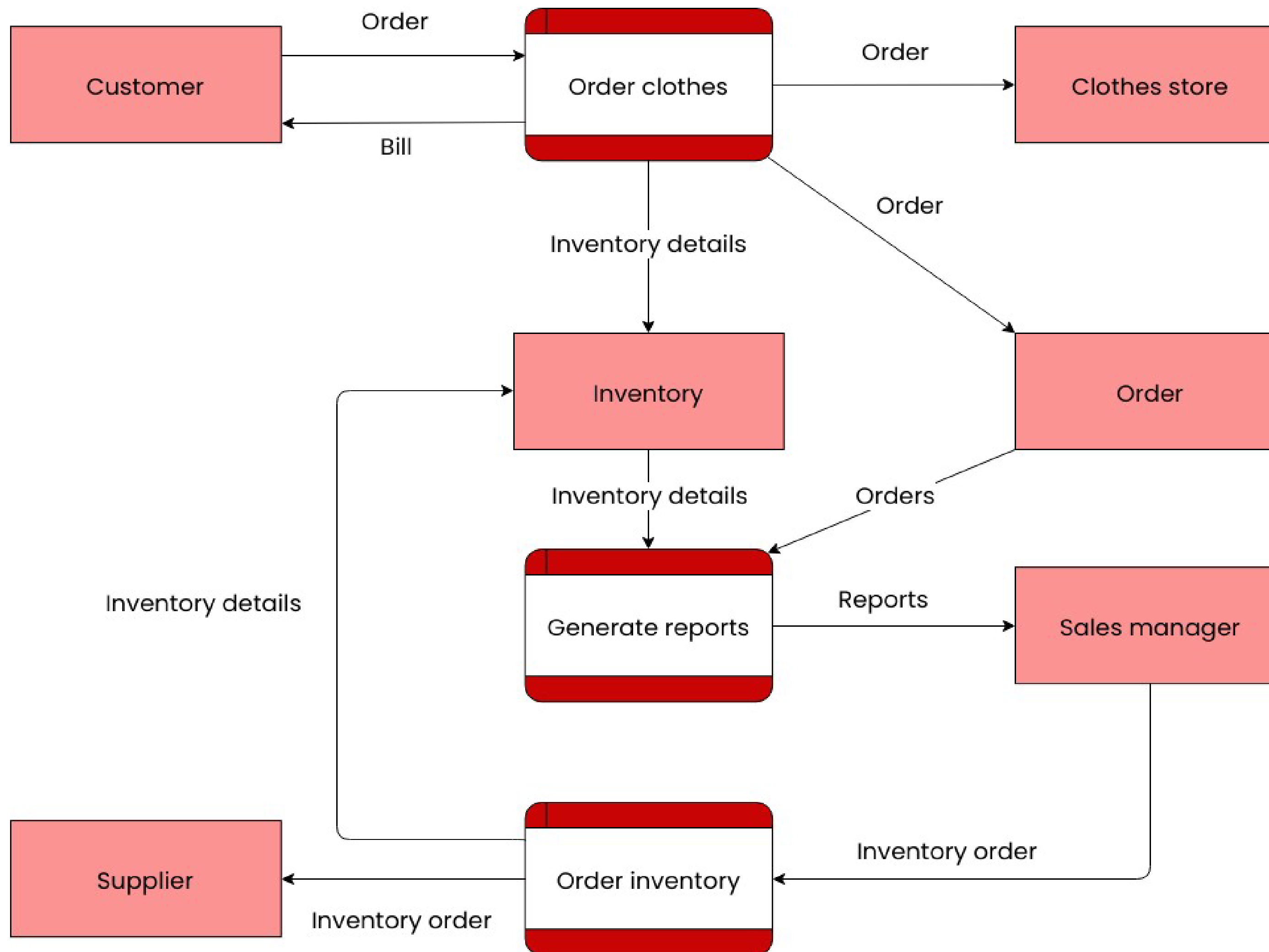


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Choose a colour scheme that reflects the theme of your costume design website. Consider colours that are commonly associated with costumes, fashion, or the style you want to convey.	Computer-Aided Design (CAD),3D Modeling Software,Wearable Technology.
2.	Application Logic-1	Profiles can include personal information, portfolio, and design preferences.	PHP,Ruby,Python
3.	Application Logic-2	Include features for adding descriptions, materials, and tags.	Virtual Reality,Photogrammetry, Augmented Reality (AR).
4.	Application Logic-3	Implement a virtual try-on feature for users to see how the costume might look on them.	Clothing Simulation Software,Machine Learning and Computer Vision.
5.	Database	Determine what information you need to store for costume design, such as costume details, materials, images, designers, and events.	MySQL, NoSQL.
6.	Cloud Database	Amazon RDS (Relational Database Service) provides managed database instances for popular RDBMS like MySQL, PostgreSQL, and SQL Server.	Azure SQL , IBM Db2 on Cloud

7.	File Storage	A cloud storage service that allows you to store, organize, and share costume design files. It also integrates well with Google Workspace applications.	Augmented Reality (AR) and Virtual Reality (VR)
8.	External API-1	Widely used for sketching and creating detailed costume designs and technical drawings.	3D Virtual costume Fitting
9.	External API-2	A vector graphic design software similar to Adobe Illustrator, suitable for costume design sketching and illustration.	Digital Textile Printing Tools
10.	Machine Learning Model	Machine learning models can be trained to recognize and classify different types of fabrics and materials, helping designers make informed choices based on factors like texture, colour, and durability.	AI-Generating Design Concepts
11.	Infrastructure (Server / Cloud)	A physical workspace equipped with design tables, sewing machines, dress forms, and other tools necessary for costume design and creation.	Design Studio and Computer workstation

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A physical workspace equipped with design tables, sewing machines, dress forms, and other tools	Clo3D,LibreCAD

S. No	Characteristics	Description	Technology
		necessary for costume design and creation.	
2.	Security Implementations	Encrypt sensitive costume design files and communications, especially when sharing them over networks or storing them in the cloud.	Firewalls and Intrusion Detection/Prevention Systems (IDS/IPS)
3.	Scalable Architecture	Use a modern front-end framework like React, Angular, or Vue.js for building the user interface. This allows for modular design and easy scalability as you add more features.	Machine Learning and AI
4.	Availability	Popular costumes may be in high demand during certain times of the year, such as Halloween.	AP and Microservices
5.	Performance	This relates to the effectiveness and quality of costume design for a specific purpose, such as a theater production, film, or special event.	E-commerce platforms and cloud computing