StyleSync
Project Proposal

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1 - Document Version

Version	Description	Date	Author(s)
1	Document Creation	03/05/2024	Mitilda Kim Charley Liao
2	Amendment to: **3.7** – Deliverables **4.0** – Iteration (Sprint) Plan Small revision to wording.	08/05/2024	Charley Liao

2 - Introduction

2.1 – Purpose

The purpose of StyleSync is to simplify wardrobe management by offering personalized outfit recommendations based on the user's existing clothes and contextual factors. It aims to promote sustainability by encouraging the reuse of clothing items, boost style confidence through tailored suggestions, and save time by streamlining the outfit selection process. Ultimately, the app seeks to empower users to express their style while minimizing their environmental impact.

2.2 – Team Contact Information

Member Name	Contact Information
Angad Singh Bains	abains101@my.bcit.ca
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2.3 – Description

StyleSync is a mobile application revolutionizing wardrobe inventory management and personal style by offering tailored outfit inspirations based on users' existing wardrobe and current context. Users can upload photos of their clothes and set preferences, allowing the app to curate personalized outfit recommendations for any occasion. By promoting wardrobe efficiency, style confidence, and sustainability, StyleSync empowers users to effortlessly manage their wardrobe while expressing their unique personality through clothing choices.

3 – Project Proposal

3.1 – Existing System

Competition to Our App:

Cladwell:
Create a minimalist wardrobe by providing outfit suggestions based on the clothes you already own. Has personalized shopping recommendations to fill any gaps in your wardrobe.
- Limited Customization Options for User Interface
- Limited Brand Selection (Uses existing repository of images from the brand stores)

Stylebook:
Digitize your wardrobe by taking photos of your clothes and organizing them into categories. You can then mix and match items to create outfits, plan what to wear, and track your most worn pieces.
- Limited Sync Options; there is no User Login to share favourite wardrobe combinations
- Not user friendly, difficult to navigate the application

Closet+:
Organize your clothes, shoes, and accessories with photos and tags. It also offers features like outfit planning, packing lists, and style inspiration.
- Pay Wall to utilize entire app, features are behind paywall
- No Sync Capabilities, one device one usage, no user login

Pureple:
Create outfits from your own clothes and discover new ways to wear them. It also offers features like packing lists, style stats, and a virtual closet.
- User Interface, difficult to navigate
- Lack of features

Chicisimo:
Outfit ideas based on your personal style, the weather, and the occasion. You can also save your favorite outfits and shop for similar items directly through the app.
- Shopping recommendations have limited range of brands and retailers
- Outfit recommendations are limited in their capacity

3.2 – Proposed Solution

1. Virtual Wardrobe Integration: Integrate a feature for users to upload photos of their clothing items to create a digital inventory or virtual wardrobe within the existing system. This allows users to visualize their clothing collection and facilitates easier organization.

2. Outfit Recommendation Engine: Implement algorithms within the system to analyze the user's virtual wardrobe, along with contextual factors such as weather and occasion, to generate personalized outfit recommendations. This involves developing recommendation algorithms based on factors like colour coordination, style preferences, and outfit versatility.

3. Style Preference Setting: Add functionality for users to set their style preferences within the system, including preferred colours, patterns, and clothing types. This information helps tailor the outfit recommendations to align with the user's unique taste and style.

4. Fashion Inspiration Integration: Integrate features within the system to provide users with fashion inspiration from external sources such as curated outfit ideas, trend forecasts, and style tips. This can be achieved through partnerships with fashion influencers, and magazines, or by curating content from reputable fashion sources.

5. Sustainability Metrics: Incorporate sustainability metrics within the system to educate users on the environmental impact of their clothing choices. This may include information on the sustainability of materials used in clothing items, the carbon footprint of different fashion brands, and tips for sustainable fashion practices.

3.3 – Alternative Solutions

1. Manual Wardrobe Management Apps: Initially, there was consideration for developing a manual wardrobe management app that allows users to input their clothing items manually without utilizing image recognition technology. However, this approach was discarded due to its limitations in providing personalized outfit recommendations and streamlining the outfit selection process.

2. Fashion Aggregator Platforms: Another alternative explored was to develop a fashion aggregator platform that curates outfit ideas and fashion trends from various sources, similar to a fashion-focused social media platform. However, this solution lacked the personalized touch and wardrobe management capabilities desired for StyleSync.

3. Fashion Consultation Services: Alternatively, the idea of offering personalized fashion consultation services by professional stylists was considered. However, this approach was discarded due to its high cost and lack of scalability compared to an automated digital solution like StyleSync.

4. Generic Fashion Advice Apps: There are existing generic fashion advice apps that offer style tips and outfit recommendations based on user preferences. However, these apps often lack wardrobe management functionalities and personalized outfit suggestions tailored to the user's existing wardrobe, which are integral to the StyleSync concept.

3.4 – Technology

- VSCode is the main text editor used for this project
- The main coding languages used are:
  - HTML, Bootstrap, CSS
  - Python, SQLite, Flask
- GitHub
  - Used as the main repository for the project
  - Used as a place to store project files and administration work
- Google Docs
  - Used as a file sharing
- Discord
  - Communication tool to message the team and video calls
- Trello
  - Software to host the project's SCRUM board
- Office 365 Suite
  - Word Document, PowerPoint, and Excel
- Figma
  - Used for visualizing the project's UI/UX design

3.5 – Minimum Viable Product (MVP)

The MVP for StyleSync will include features of:
- Sync Capability which includes:
  - User Login Capabilities (Encrypted)
- Home Page Layout:
  - Navigation Bar
  - Item Boxes to choose clothing Article to "try-on"
  - Save Customized Outfits
- Saved Outfit Page Layout:
  - Navigation Bar
  - Demonstrate Customized Outfits
    - Thumbnail Image w/ Name of Outfit
  - Filter of Outfit Tags
- Wardrobe Inventory Layout:
  - Navigation Bar
  - Filters of Clothing Article Categories
  - By Default: Demonstrate all Clothing Articles
- Functioning Database (Backend)
  - All Customized Outfit data saved to logged in user

3.6 – Provide a breakdown of each member's responsibilities

Member	Role(s)
Angad Bains	• Back-End Developer • Front-End Developer
Tanish Bansal	• Code Lead • Back-End Developer • Middleware Developer
Matthew Chow	• Front-End Designer • Application Test Developer
Chae Won (Matilda) Kim	• Secretary • Administrative Work • Middleware Developer
Charley Liao	• Group Leader • Version Control • Administrative Work • Application Test Developer
Misha Makaroff	• Version Control • Front-End Designer

**_Our roles for Scrum Master and Product Owner will rotate for every week._

3.7 – Deliverables

1. Personalized Recommendations:
   - Start with a simple algorithm or system based on category tags for generating tailored suggestions for clothing items and outfit combinations based on user preferences.

2. Wardrobe Organization:
   - Feature enabling users to catalog and organize their clothing items within the application.
   - Functionality for adding, editing, and deleting wardrobe items, including images, descriptions, and categorizations.

3. Outfit Creation:
   - Capability for users to mix and match clothing items from their wardrobe to create outfits.
   - Options for filter clothing by colors, patterns, and styles virtually, within the application.

4. Synchronization:
   - Ability for users to synchronize their wardrobe data across multiple devices for seamless access and management.
   - Implementation of secure data syncing to ensure data integrity and privacy.

5. Documentation:
   - User documentation or tutorials providing guidance on how to use the application's features effectively.

4. Iteration (Sprint) Plan

Sprint #0: Team Development and Organization
- Topic Selection
    - Decision of Project Topic
- Administration
    - Team Charter
    - Team Project Proposal
    - Determine Means of Communication
    - Develop SCRUM Board

Sprint #1: App Skeletal Development›
- Basic working back-end and front-end; synced with a middleware
    - Preliminary Home Page, `*homepage.html*`
    - Login Page `*login.html*`
    - Register User Page `*register.html*`
- Basic database with working relations
    - Create a `*models.py*`
    - Create a `*manage.py*`

Sprint #2: Management Development
- Create API for Adding and Removing Outfits and Clothing Articles
    - Custom Outfit Page `*outfit.html*`
    - Wardrobe Page `*wardrobe.html*`
    - Create HTML Buttons (Create, Delete, Edit) for pages
- Add Clothing Article Page
    - Create `*addclothing.html*`
- Edit Outfit and Wardrobe Article Page
    - Create `*editoutfit.html*` → Links to *outfit_id*
    - Create `*edititem.html*`

Sprint #3: Image Integration & Refinement
- Integrate an image database to store clothing and outfit images
    - Image Upload Capabilities

Sprint #4: Refinement
- Refinement on the User Interface
    - Customization Capabilities