Hybrid CMS for Fashion Ecommerce

Overview:

The project involved developing a content management platform with hybrid cloud storage to manage assets for apparels in the fashion industry. The client is a digital advertising agency specializing in fashion, beauty, home and lifestyle industries. They operate E-commerce studios and advise their customers on E-commerce strategy and execution. After analyzing the client's need, Mindfire developed a content management platform with an admin managed portal.

Client details:

Name: Confidential | **Industry:** E-commerce | **Location:** Canada

Technologies:

Django, Rest Framework, ReactJS, Bootstrap, PostgreSQL, AWS Services: Amazon S3, File Storage Gateway, Amazon EC2

Project Description:

This application helped the client build a headless CMS Solution in the fashion industry. It is used by designers and artists who extensively use Adobe Photoshop. Some salient features of the application:

- The solution supports multiple client specific content like clothing, avatar, position etc. There were different avatar types (based on body type) and the avatar looks could be exclusive to a client or open ended.

- The CMS revolves around Client, Avatar, Pose, and Clothing. An avatar can be of 4 types i.e. Men, Women, Men Plus or Women Plus. Each avatar has up to 4 different positions i.e. Front, Back, Front Right and Front Left.

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- Custom Photoshop plugin displays different clothing elements on the avatar.

- The user can navigate and manage the avatar, pose or clothing through the dashboard.

- They can add information to create a new client/avatar. While creating an avatar, user has to select the avatar type like men, Women, Men Plus or Women Plus.

- The user can upload the images for avatar poses/ clothing samples with proper naming convention. This ensures ease of access for different admins to view the details. Once a user selects the files with appropriate naming convention and clicks on upload, all the files are uploaded to AWS S3 bucket in a required directory hierarchy.

- The user can view the client or avatar that has been created. They can also track the poses or clothing sample that has been uploaded under the clothing menu option in CMS.

- Users can edit the pose and clothing sample image on S3 using the edit button provided in each row of view poses screen or clothing screen.

- In the UPC section, admins can view and search all the UPCs that are being created. There's an action drop down field which defines the actions they can perform on a bulk of UPCs. It can also be used to update/delete UPCs.

- Django framework was used to build an API-driven CMS system.

- The previously existing setup was modified to develop hybrid cloud storage and an API Driven CMS.

- AWS File Storage Gateway was set up to provide a hybrid cloud storage service that gave on-premises access to virtually unlimited cloud storage.

- A file gateway provides a simple solution for presenting one or more Amazon S3 buckets and their objects as a mountable NFS or SMB file share to one or more client's on-premises.

- AWS Hybrid cloud storage helps to build a secure and scalable system. It optimizes data transfer between the gateway and AWS using multipart parallel uploads. It also provides low-latency access to data through transparent local caching.
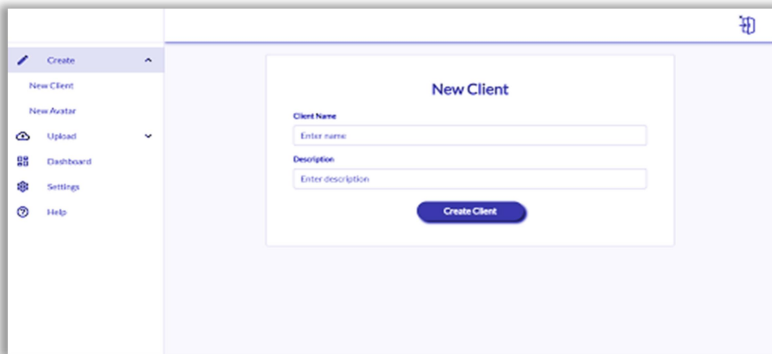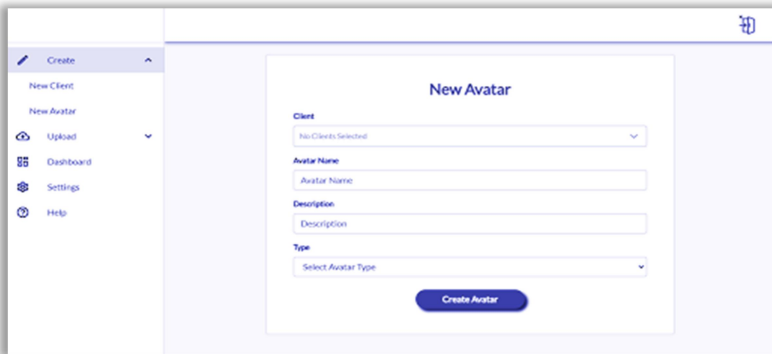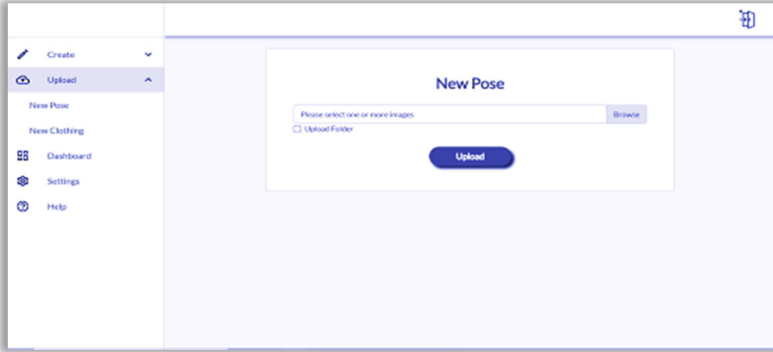
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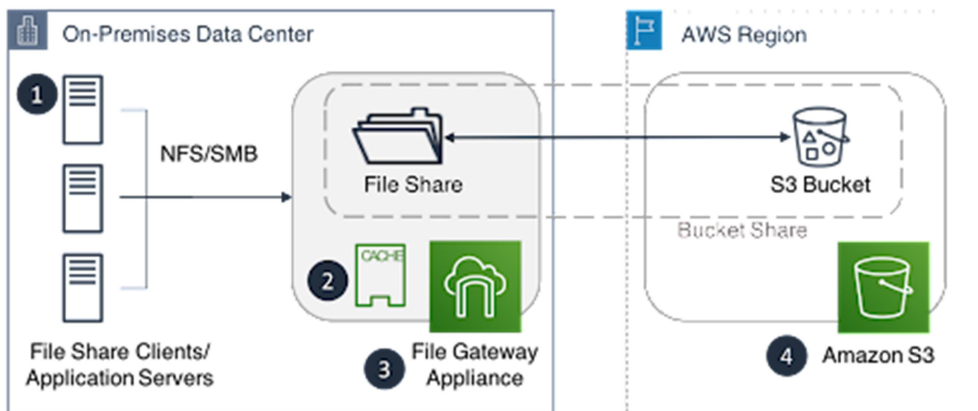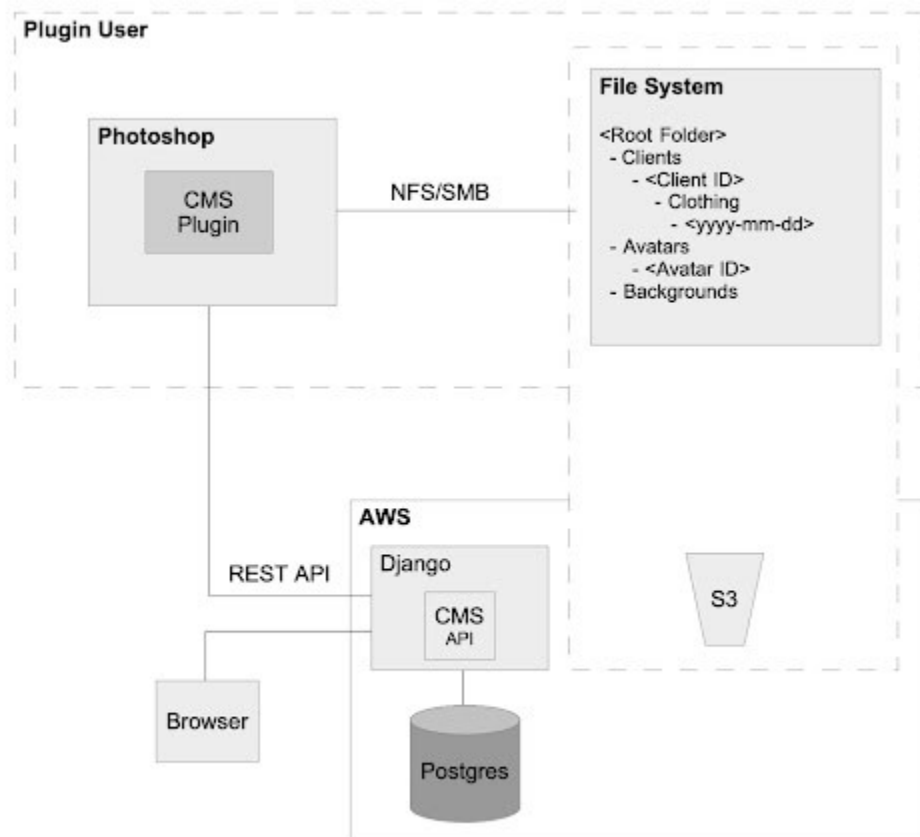
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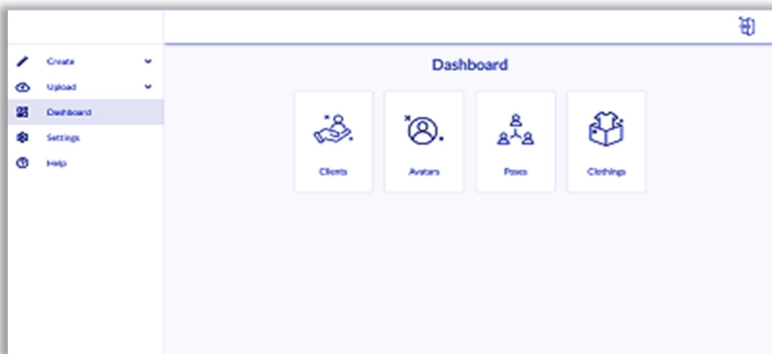
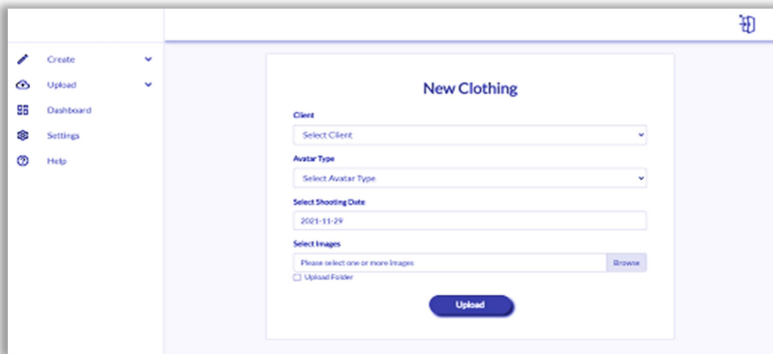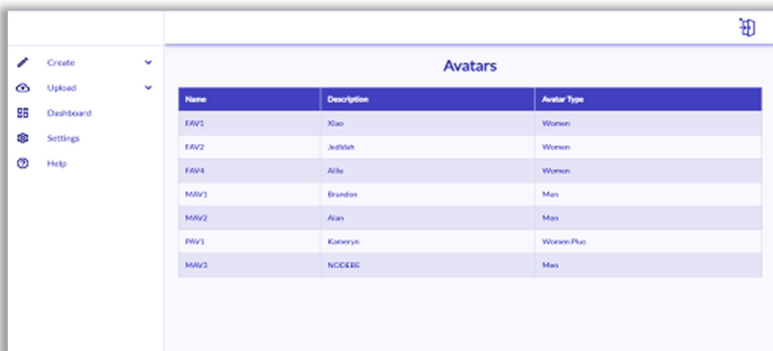**Screenshot 1**: Dashboard

Screenshot 2: Add Client

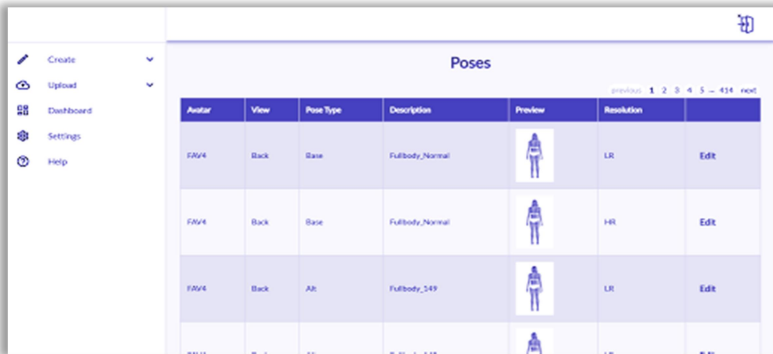**Screenshot 3**: Add avatar

Screenshot 4: Upload pose

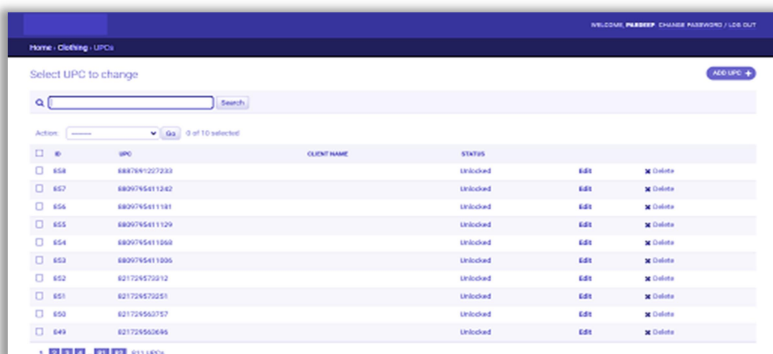**Screenshot 5**: Upload clothing sample

Screenshot 6: View avatar

Screenshot 7: View poses

Screenshot 8: View clothing

Screenshot 9: View clothing UPC