2014



STYLOPEDIA

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Introduction

Fashion has a great impact on the fabric of societies all over the world. The Fashion industry is a global industry where fashion enthusiasts, fashion designers, merchandisers and retailers from all over the globe collaborate and design and consume trendy products. On an average in UK, consumption on clothing and footwear is € 59 billion (Year 2012 statistics).Clothing and footwear spending's are around € 370 billion, 5.3% of total household consumption in the European Union (EU). An average American spends 3.4% - 4% of their income on fashion. Hence we see a great demand in fashion. There is a huge market out there which is yet to be tapped. Currently there is no single portal for all things "FASHION". There is no platform for fashion enthusiast and fashion designers to interact and share views.

The youth of the world wants to stay informed of the latest fashion trends, what celebrities are wearing and what is the most popular brand. These users need interactive and entertaining ways of obtaining this information. With the rise in Web 2.0 technology everything is moving SOLOMO. Web 2.0 technologies such as Twitter and Facebook have a great influence on the opinions and sentiments of the consumers.

Stylopedia came into existence to address the need for a fashion portal where fashion designers and fashion enthusiast interact with each other. Expert fashion designers can provide personalized advice to users thereby enriching their user experience. Groups can be formed based on common interests and users can network and communicate with each other and help the entire styleopedia community stay trendy. We also offer 'Weekly Trends' based on Twitter sentiment analysis and make suggestions of the most popular brand of the week. The 'Style it!' tab uses a Custom Style Search Engine and obtains an array of results by giving their style preferences. It acts as a platform to launch upcoming fashion designers. They can display and sell their merchandise on Stylopedia thereby providing a portal for fresh talent to flourish. The users reap the benefits of a Comprehensive Fashion site.

Revenue Model

Our site follows the **Freemium Model**. We provide most of the features free of charge, but proprietary features such as suggestions based on twitter sentiment analysis and the **Custom Style Search Engine** are available only to the premium users of the site.

Free users will have access to the fashion platform and will be able interact with other fashion enthusiasts. They will have access to the Shopsense API and will be able to shop for the most fashionable clothes and accessories from our site. The users have access to RSS feeds from Fashion sites and Social media feeds from our Stylopedia page on twitter and Facebook.

The premium users have access to Style Suggestions based on Twitter analytics .The Custom Style Search Engine will be available to the premium users. This uses social media analysis and

provides recommendations based on user preferences. Apart from this premium users can interact with Top Fashion designers and Photographers in the industry and obtain personalized fashion advice.



Premium Paid Users are of three categories:

Account Type	Annual Subscription Fee	Access Level
Silver	\$100	Tier 1 Designers and Photographers
Gold	\$150	Tier 2 Designers and Photographers
Platinum	\$200	Tier 3 Designers and Photographers

The Shopsense API incorporated in the site will enable Stylopedia earn revenue when users click from the shopsense enabled Ad's, widgets, layouts or application. We can obtain \$0.05 on a per-click basis.

We also plan on adding Advertisements in the site which will be visible only to the free users. The premium users will enjoy an ad free experience.

Competitor Analysis

Based on our analysis of the current market space we identified 3 main competitors.

preferences.



Chicisimo is a fashion website for women. Users can share their personal styles with other users. Their ideas are shared through pictures uploaded by users. They can search other users by name and check out their gallery. Images can be clicked to find products by name. However this site has many dead links and is specific only to women. It does not have analytics component. It does not display suggestions based on user



Snapette is a location-based shopping mobile application and website. It features products from local fashion stores. It acts as a digital resource for shoppers, enabling users to find nearby stores, products, and exclusive offers. It also features content submitted by

retailers. It is specific to women users and does not incoporate analytics component in the site. It does not provide a platform for users to interact with fashion designers.



FashionPedia is a site which contains links to other websites. It contains recent fashion news. It contains many dead links and does not have comprehensive fashion news. It does not contain analytics component and does not provide suggestions to the users. It does not act as a platform for users to interact with each other.

Criteria	Stylopedia	Snapette	Chicisimo	FashionPedia
Display latest fashion trends	✓	✓	✓	✓
Shopping from site	✓	✓	✓	*
Fashion Suggestions based on Twitter sentiment Analysis	✓	*	*	*
Newsletter	✓	*	*	*
Custom Style Search Engine	✓	*	*	*
Weekly Fashion Trends	✓	*	*	
Fashion Networking platform	✓	✓	✓	*

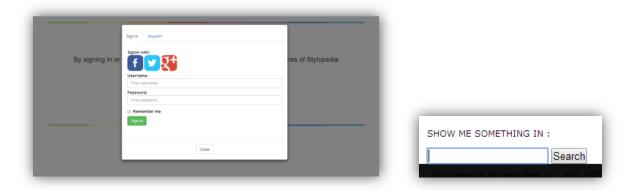
Based on this analysis Stylopedia has a clear differentiating factor as compared to the other competitors.

Key Scenarios

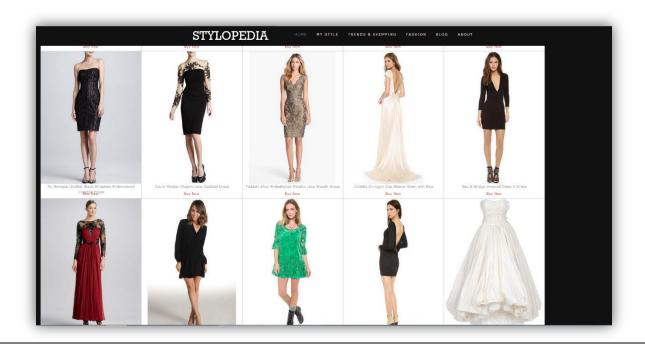
The website provides multiple functionalities for users who visit our website. Some of these functionalities also differ based on the user type. We will discuss three key scenarios which would be common for any visiting user.

Apparel search and shopping

The Shop Sense feature under the Trends & Shopping menu provides user the functionality to search for the latest trends in their choice of clothing. A visitor does not need to be a registered user to use the search feature under Shop Sense. However, the user won't be able to make any purchases without an account on this website. Let's consider the case of a registered user. The user first signs-in by clicking on the Sign In/Register button on the home screen. He is directed to the below sign in screen, where the users can even sign-in using Facebook, Twitter or Google Plus.



From the home screen the user can then access the Shop Sense screen through the Trends & Shopping menu. Here, the user can use the search box to search of his/her choice of clothes or



accessories.

Let's do a sample search for item "Dress". The website will display the latest fashion trends in dresses as displayed above. Clicking on any of the item would take the user to the website where the item can be purchased.

Information on trending brands for the week

A user can also use the website to find out information on trending brands for the week. This information is based on social media analytics performed on a list of fashion brands. To look for this information a user can select the Weekly Trends option under the Trends & Shopping menu. The fashion brands are organized on this screen based their decreasing order of their popularity for the previous week, with the top trending brands on the top. Clicking on the brands would take users to the brand website. As a future functionality, we also plan to display the top trending items under each of these brand.

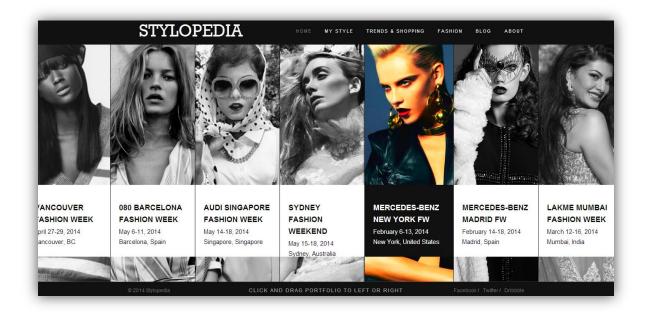


General browsing for fashion related news and information

Fashion related news and information is provided on various screens of our website. This information is in the form of Social Media feeds, RSS feeds, Fashion Blog and information on upcoming fashion shows and fashion media. A user can find this information by navigating

using the menu to navigate through the website. Following are some the screenshots of these pages.

Fashion Shows



Fashion Media



Links for fashion posts on home screen



Novelty

Today there are lot of websites that provide information related to fashion and styling in general. However, they fail to incorporate current trends as well as sometimes fail to understand the audience. Stylopedia understood the current trends, analyzed the social media and came up with a novel design of one stop for fashion.

One stop for fashion and styling:

There are number of fashion websites available in the market, but very few have dynamically rich content and trend analysis. Stylopedia is a one stop fashion portal that will allow users to buy fashion clothes, browse latest fashion trends, watch videos, read blogs and forums.

Attractive GUI with mobile functionality:

Stylopedia, being a fashion web site the look and feel of the website is of prime importance. Thus we made our website as attractive as possible. With the use of HTML 5 and CSS designing we could make a fully functional alluring fashion website.





Fashion Trend analysis using twitter sentiments:

We incorporated twitter sentiment analysis using R- programming to get the fashion related tweets. As our users will be interested in latest trends, we analyzed the tweets collected from twitter. Based on the number of tweets and the tweets received we made a webpage to display the latest brands trending the market. As fashion is all about what's new and trending, users would be interested in knowing which brands most fashion designers and users prefer.

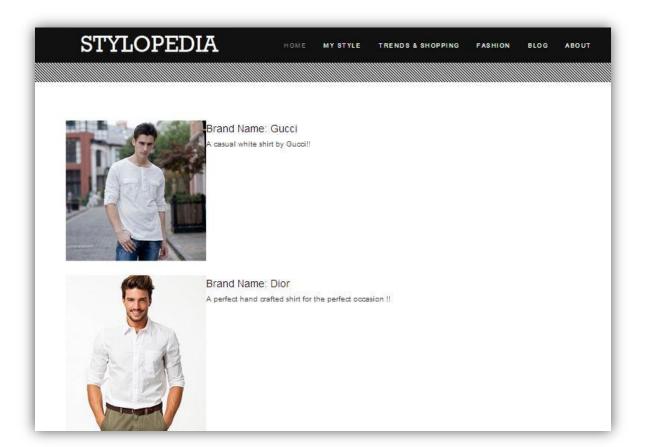
Custom search using ShopSense:

We have included the ShopSense API which will allow the users to search for custom fashion items. Based on the results, users can buy the items.

Display latest trend based on Gender and color preference of user:

Another novelty feature of our website is a custom style engine. We show images based on what color and gender the user chooses. For example, if the user chooses white color and male as gender, then our website will show all fashion related clothing related to white color.

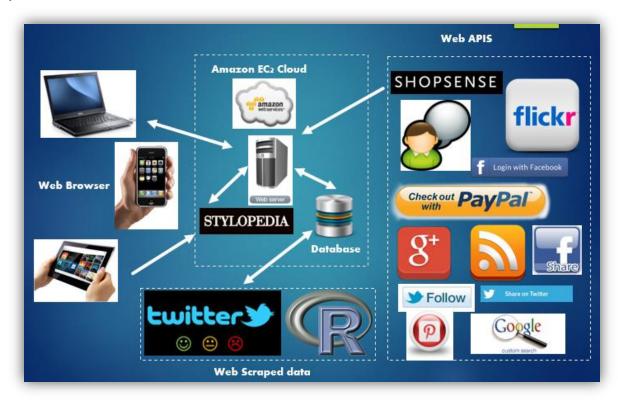




Cloud Based:

Our website is hosted on Amazon EC2. We chose to host the website on cloud as availability and scalability are important for our website to be successful. With cloud we do not have to worry about fluctuations of incoming traffic. For example, it may happen that during festive season our website may face huge incoming traffic. As our website is hosted on cloud, Amazon EC2 will take care of the necessary resources required.

System Architecture



The above diagram gives you an overview of the system architecture implemented for developing Stylopedia. It basically includes three major components. The right side of the figure contains all the APIs implemented which will be talked about in more detail below. The second component is the hosting of all the applications on Cloud. For this, we made use of the Amazon EC2 services. It contains all the applications with respect to Stylopedia. The third important component is the tools used for analysis i.e. Twitter sentiments and R programming. So basically what we did is, we fetched the tweets about different fashion brands with the help of Twitter Live Streaming API. Then we calculated the positive and negative sentiments of those tweets by comparing the words with a list of lexicons. Based on the most popular and most positive results, we sorted the most trending brands.

APIs Implemented

Summary of APIs used

API	Use in our system
ShopSense	Shopping API which allows you to search for your favorite outfit and lets you purchase it instantly. Also the more clicks for purchases through ShopSense API, the more possibility of earning rewards.
Facebook Like and Share	Basic Social Media Integration in our website which will allow you to share, like the interesting posts, blogs, news, pictures etc.
Twitter Share and Follow	Another Social Media integration into our website which would allow you to share your favorite blog, pictures, news etc. and also allow you to follow your favorite brand or designer.
Facebook, Twitter and Google+ Log in	You can Login into our website using your Facebook, Twitter or Google+ account.
Pinterest	Allows you to pin your favorite picture or video which would then show up in your Pinterest account.
Flickr	Allows you to see the most popular pictures, news about the topmost trending brands.
RSS feeds	Provides you the latest information in the fashion domain. Which includes fashion shows, parties, designers etc.
PayPal Express Checkout	For the premium users in our website, they will be able to pay using PayPal Express Checkout.
YouTube	With the help of this API, we can cast a live streaming of fashion shows and also the previous shows.
Script Chat	This API would allow the premium users and the fashion designers interact with each other over the chat.
Twitter Sentiments	Obtaining the twitter scores for each brand and evaluating the top most trending brands.

Future Extensions

We believe Stylopedia has a strong business case and a fashionable UI, however we have certain points that we can add as future extensions to make Stylopedia even more dynamic and give it a strong business value.

A Mobile app: Though our website is compatible with most of the mobile platforms, we can have a mobile application that would be short and concise. This mobile app will allow users to do majority of the functions that Stylopedia would do and will also maintain a simple yet stylish interface. As the world is moving towards the mobile functionality, a mobile app would definitely help Stylopedia market itself.

Improved integration with Social Media: Right now Stylopedia uses the free API of various social media websites like twitter, Facebook, flickr etc. However we can leverage our integration with these websites so that we can have improved functionality and more dynamic website.

Improved Style it!: Current Stylopedia has a novelty feature called Style it! We can further enhance this feature by adding more options like accessories, apparels, type of clothing etc. Based on what options user chooses, we can provide him with the results.

More personal touch: As of now due to limited number of users we could not test for a personal user experience. However in future we can provide recommendations based on what users usually buy from the website. For this we can use some kind of predication model as used by amazon or ebay to predict what the user is more likely to buy. Apart from this we can give the option of styling Stylopedia to the user. This would mean, user could customize its user experience by having his/her Avatar which they can style to check how the avatar looks. Additionally user can choose any theme they want for the website.

Increased audience: As of now most of the features are USA centric. In future we would like to make Stylopedia global. We can add additional novelty features that would allow Stylopedia to grow internationally.

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