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Intelligent Optic Center

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Abstract — *Intelligent Optic Centre is an E-Commerce website which contains various types of glasses such as Sun-glass, Power-glass, etc. It also consists of frames & accessories. User can easily get the information as per their requirement and easily use it. They are able to understand the helping information. The help desk is able to guide user properly. Its main aim is to provide virtual try on face by uploading their face image as well as they can try frame by capturing their face on web-camera. User can compare the frames on their faces. It also provides the tips regarding Eye-care, Contact-lenses, Style & Elegance, Fashion and Special Occasions.*

Keywords- *Optic centre, Virtual try, For Eyewear, Digital distribution, Internet Marketing, Product Comparison*

I. INTRODUCTION

Now a day's there are number of choices in glasses with frames such as eye glasses, sun glasses, power glasses etc. It is very difficult to get what you want in terms of brand, quality, color and shape at your desired price. With the help of internet medium we are trying to gather all different branded eye glasses at different level of quality, type of products, shape of product, color of product, material used, different style and price user is looking for. The main objective of the project is giving a second option with large range of product displayed with easy filtration process, that e-store named as "Intelligent Optic Center".

Visitor can: Visitors can easily get the information on the product they select. They get details of each product like frame color, category, frame for gender, shape of the frame, price of the frame, rating of product, product offers. They can also post their reviews / feedback on selected frame. The key feature of website is they can virtually try the eye frame, by uploading their face image and capturing their face by webcam. Visitor will also get tips on each product they should buy. Visitor can register themselves and make them themselves as site's registered customer.

Registered Customer can: Registered user can add the product to the cart and shop online. The product can be bought either by cash on delivery or debit card or credit card or paypal or net banking. Before shopping, the user can place the selective products into the favorites. Registered user can also track the order once they place the order. Registered user can also rate the product.

Web Admin can: The web admin can add / update / delete / suspend any product on website, also can manage the product pricing. Web admin can manage the content of website with easy editor as good as Microsoft word. Web admin can able to manage their customers also. There is a dashboard setup for easy access to all important part of web admin features.

II. PURPOSE

The main purpose of this is to provide a virtual platform for the user to try a frame on their own face by uploading their image or by capturing the face using web-camera. Other purposes are:

For Eye Wear Product manufacturers: To sale their products and manage current range of products and featured products.

For Visitor: Explore the list of products, can view the tips.

For Registered Customers: Explore the list of products, have a virtual try, can share and get opinion from friends and relatives, place order, track order and get delivered at their place, and know their product delivery status. Also can place repeat orders.

III. FIGURES

3.1 Block Diagram

The figure below is a block diagram for virtual try of the product. User needs to select specific frame which they want to try on their face. After that they need to select how they want to try a frame. They can perform try either by uploading their front face image or by capturing their front face using web-camera. After that by clicking on Try it Now, they are able to see the frame on their own face.

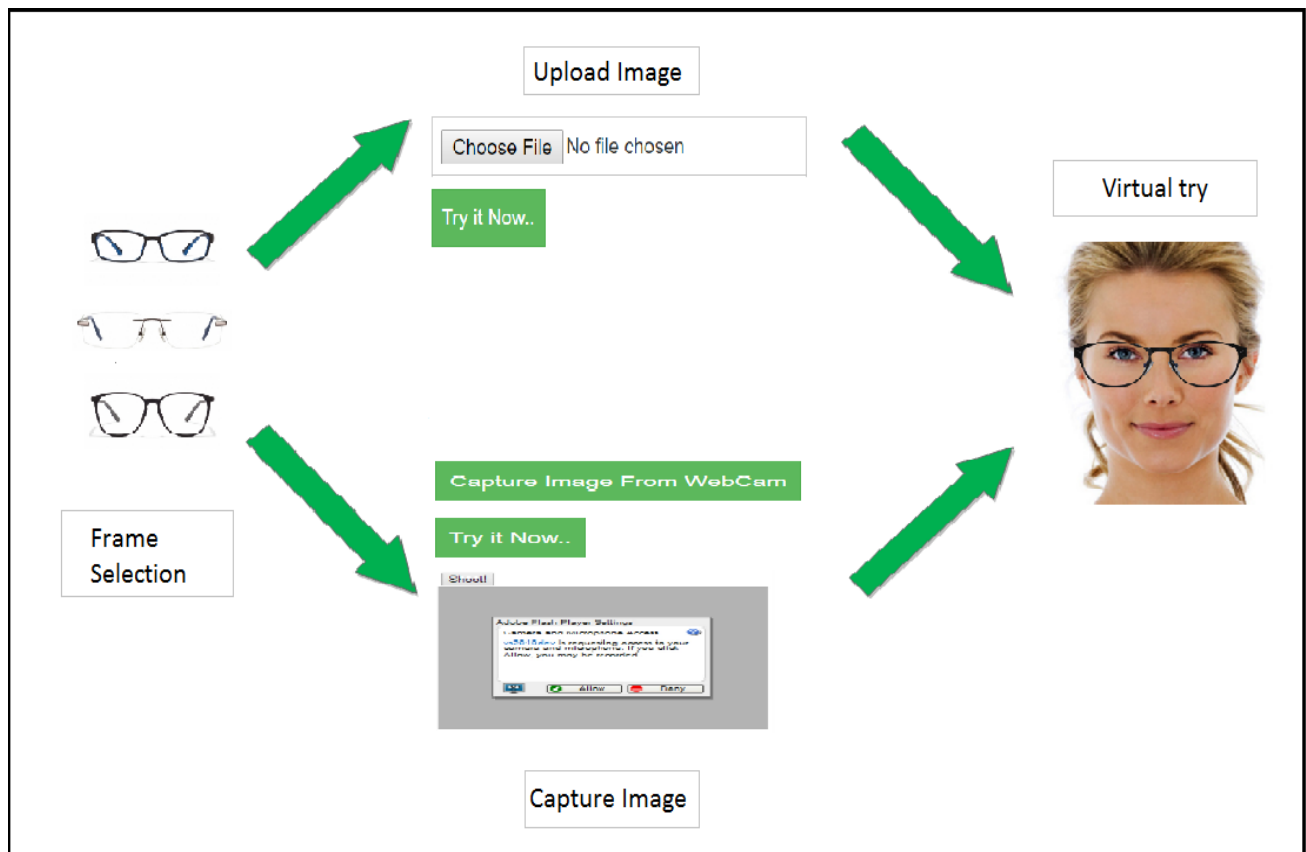


Fig 1 Block Diagram of Virtual Try

3.2 Flow Diagram

The figure below illustrates the complete flow of virtual try. It demonstrates what kind of activities a registered and unregistered user can perform. Unregistered user is able to register themselves, can view the website, able to filter the product according to their requirements as well as they can see the reviews about the product. Registered user is able to login into the website, they can view the website, can filter the products according to their requirements, able to place order, also they can rate the products. Most advantageously they are able to virtually try a frame on their own face either by uploading their front face image or by capturing their front face image using web-camera.

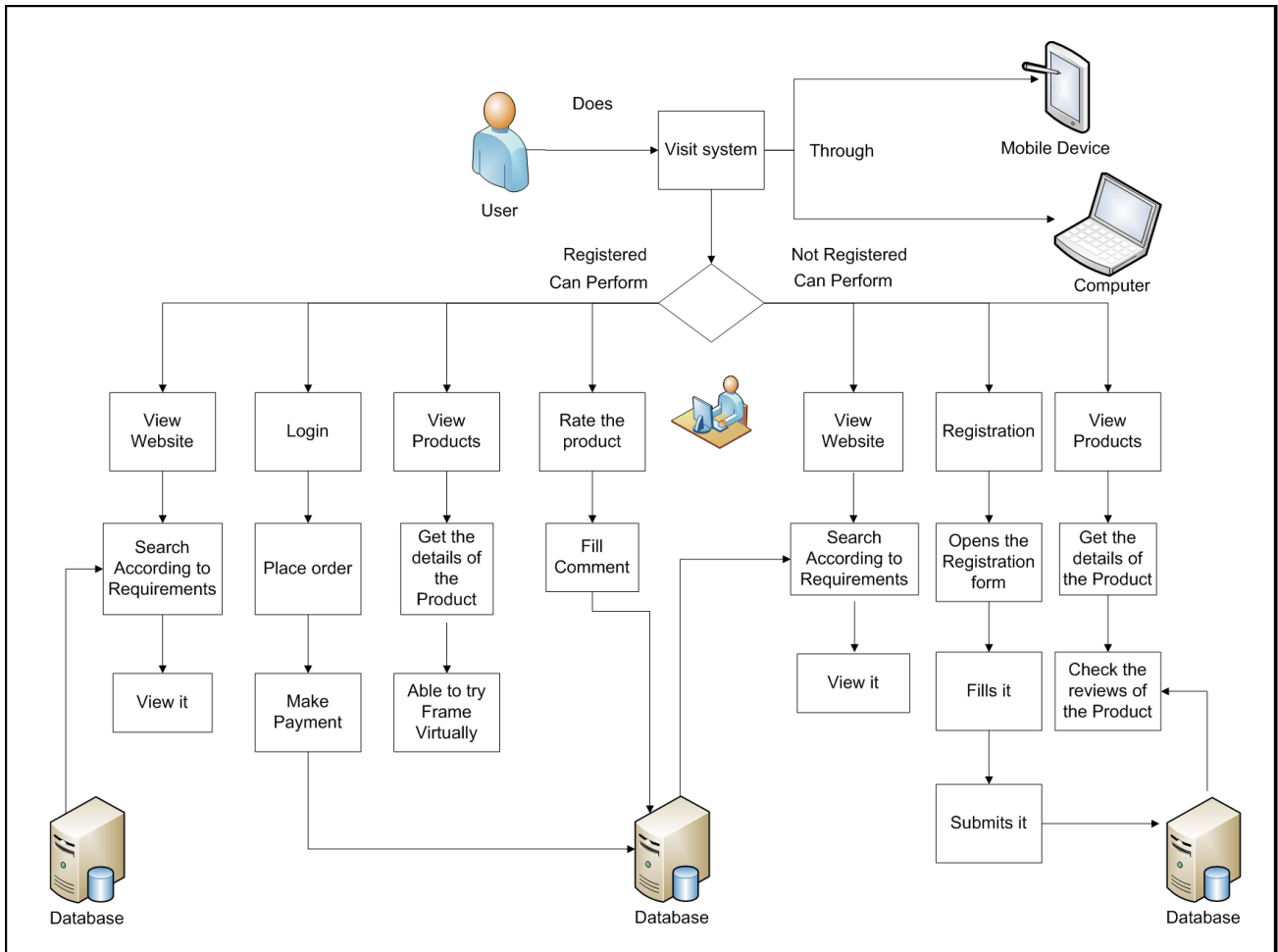


Fig 2 Flow Diagram of Virtual Try

IV. RELATED WORKS

4.1 Internet Marketing

Internet marketing is a way for marketing of products using web and email that enables direct sales via e-commerce site. Intelligent optic centre provides a platform for all distributors as well as retailers for selling their frames, different types of glasses at one place. This is possible due to internet marketing. In this we are providing different types of glasses like Sunglass, Eyeglass, Powerglass of different brands with different colors and shape. According to Linda [1], at the product page, product description can show the details of the target product.

4.2 Digital Distribution

Digital distribution is a way by which we can distribute our products directly in the online market by using the website. Through the Digital distribution, it is possible to distribute all the products as per the customer's requirement. Customer can see brands and their stock in a new way and engage with them on a completely new level [2].

4.3 Data Collection

Data collection is the process of collecting and measuring information on some targeted variables in predefined fashion. Accurate data collection is very essential as it helps in defining selection process of product. Data of product is collected at the time of insertion of product in the database which contains all the information of product including type, color, shape, image, brand and category of the product.

Data of the customer is collected at the time of making registration of the customer. Customer need to provide their personal details as well as their email-id and password. The information is further used to login into the website. After login customer is able to use many features of the website such as virtual try.

In addition, the sales are increased on items with positive reviews, and the increases are substantial. According to Bill [3], products with more than 50 reviews have a 65% lower return rate than products with no reviews.

4.4 Online Transactions

Lot of studies put their efforts and provide the baseline for the online transactions, vendors and management systems for E-commerce [4]. The website provides it's users with the option to pay through online transactions as they are quick and secure.

4.5 Online Product Comparison

For finding a suitable product, online consumers usually look for their appropriate sizes, fitting and price of the product, which also plays a very important role at the product page [5]. Not only the users can choose from a wide range of options, but they can also compare the similar kind of products by different brands.

4.6 Virtual try

Virtual objects can be superimposed on real world images and the sensation is that they are part of the scene [6]. Virtual try is the way to provide a virtual platform where user is able to feel how the frame will look on their face. It provides exactly the same feel as they are wearing physically. Virtual try is provided by two ways, one is by capturing image of user on web-camera and second is by uploading users image on the site and then trying a frame on their face.

V. CONCLUSION

This E-Commerce website provides various types of glasses such as Sun-glass, Power-glass, etc. It also consists of frames & accessories. User can easily get the information as per their requirement and easily use it.

The main perspective of the site is to provide virtual try for customers either by uploading their face image or by capturing their face on web-camera. User can compare the frames on their faces. Users are able to use the tips regarding Eye-care, Contact-lenses, Style & Elegance, Fashion and Special Occasions.

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