**MODULES**

The project contains six modules. They are,

* User Endorsement
* Training Data Set
* Markovian chain transitions
* Clustering Keywords using Aggregate Markovian
* Efficient Search Result
* Report
* User Wise Mining
* Image Utilization

**USER ENDORSEMENT**

User Endorsement is the initial module in this application. The new user has to do the registration process to access the application in online. The registration process includes username, password, address, phone etc. Once the registration process is completed successfully the user can login with the username and password and then image search is performed.

**TRAINING DATA SET**

During the training phase of the system the images are considered with no annotation. The images are loaded with certain similarity of keywords. As the users issue queries and the images is picked based on the similarity measure between the user query and the web page information. The system automatically identifies the similarity images based on the Meta information. The user never annotates the images explicitly, this happens by the system transparently from the user. The system uses the annotations available from the training phase but also the keyword relevance probability weights also evaluated during the training phase to return images that better reflect the users preferences and improve user satisfaction.

**MARKOVIAN CHAIN TRANSITIONS**

The user implicitly relates the retrieved (downloaded) images to her/his query. The Markovian chain transitions in the order of the keywords the aim of the proposed approach is to quantify logical connections between keywords. If some user relates image to his query, where keyword follows keyword and this occurs m times, then the one step transition probability is being updated this procedure constructs a Markov chain where each keyword corresponds to a state. Each time a keyword appears in a query, its state counter is advanced; if another keyword follows in the same query, their interstate link counter is also advanced. The occurrences of the keywords but also the sequencing of these occurrences is both measured this way. The queries pertaining to an image are batch processed for this image, the counters are advanced, and the probabilities are updated as efficient results.

**CLUSTERING KEYWORDS USING AGGREGATE MARKOVIAN**

In this module, the relation between the image and the keyword mapped in the Markovian Chain transactions are aggregation here. By clustering the keyword space into similar keywords fast retrieval can be performed. For this purpose, the Aggregate Markovian Chain of all the queries asked by all users regardless of the selected images is constructed in this step. The kernel of this process is calculated in a similar to the previous step even though a Markov kernel it will be used to cluster the keyword space rather than estimating an explicit probability distribution, hence the purpose of the AMC is to model keyword relevance. So the optimization is performed. The AMC will be used to cluster the keyword space and define explicit relevance links between the keywords by means of this clustering.

**EFFICIENT SEARCH RESULT**

The Efficient Search Result is the final module in this project. Here user submits the query to retrieve the respective image they required. The server process the high level image retrieving techniques such as the markovian chain transaction and clustering is performed based on the keyword aggregation using MSI and checks the relationship between the image and the keyword and shortlist the unwanted images and efficient search result will be displayed to the user.

**REPORT**

Report is the final module in this application. Here the user wise mining and maximum utilization of image in the search process is taken as the report for future transaction. In the user wise mining the favorite type of image of an individual can be identified. In the image utilization process the images maximum downloaded by the end user is identified.