

COUNTRY PATIENT ANALYTICS APPLICATION

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Abstract; Country patient analytics project management dashboard is an application which is designed to visualize large volume of data which is run through a spark job. The dashboard helps to gain better insights about the project and to make the appropriate business decisions. It helps the user to gain a better understanding about the project flow. The graphs are designed using D3 java script where there are various filter options are provided for the user to have a better interaction with the graphs. On each selection of the filter, the graph changes accordingly. The different kinds of charts that are used in the application are bar charts, stacked bar chart, heat map, pie chart, Box plot, Km curve etc. . The spark job is run at the backend and through the API call the respective filters are sent to the front end by filtering at the ES (elastic search) level, the received filters are used in filter tab through which the user can have the interaction with the graphs. The application includes the sign in where only the authorized user can only be able to use the application through a username and password. Once the user logs in to the application the user view the dashboard for the project that are created. The user can also create a new project with the necessary details such as the project name, description, date of creation etc.

IndexTerms – Dashboard,Vue js,D3 js

I. INTRODUCTION

An undertaking the executives dashboard is an information dashboard that showcases key execution pointers relating to explicit activities. A venture the board dashboard can show measurements for an undertaking's general presentation and progress, or feature specific issues that require further consideration. This kind of dashboard is ideal for singular divisions that need to screen the achievement of tasks and missions. project the executives dashboards are explicit to the goals of the venture. In organizations, everything being equal, this kind of dashboard works really hard of zeroing in on the particular cycles with the goal that endeavors and execution adjust.

Undertaking the executives dashboards give a speedy outline of group progress for you and your partners. These dashboards catch information about project execution and achievement accomplishments, and transform it into a simple to-filter show, so you rapidly realize how to push ahead.

Most undertaking the board programming contributions incorporate a dashboard apparatus. Revealing and task following are frequently center highlights of PM devices, offering visual reports or dashboards so directors can see things like undertaking status, costs, and other key data initially.

Picking PM programming can be overpowering; various apparatuses offer distinctive usefulness, and evaluating differs broadly from one merchant to another

Kinds of Facilities Delivered by CPA (country patient analytics) Application

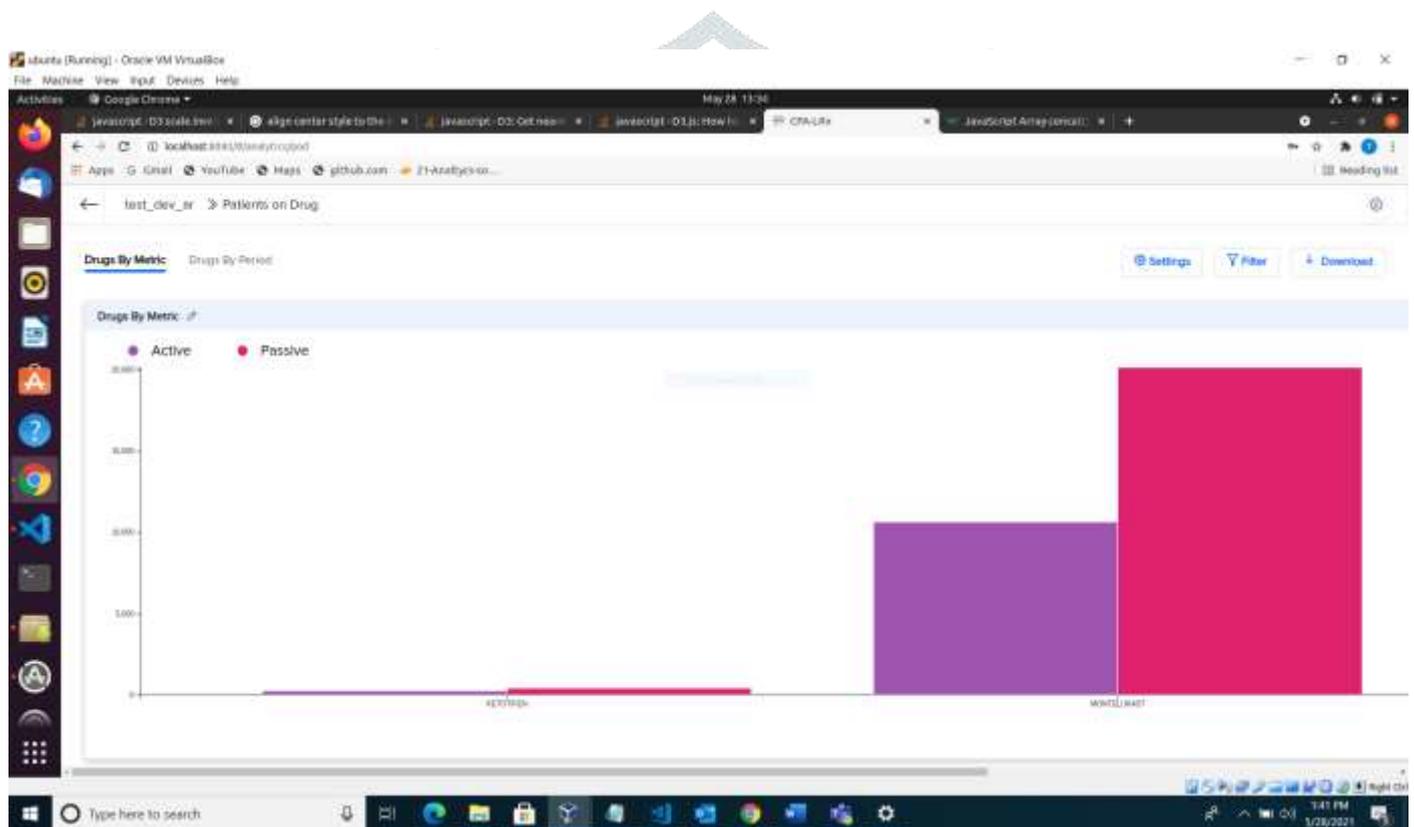
- Project management
- Visualization of large volume of data
- Running a spark job
- Interactive charts
- Security of data
- Management of huge volume of data
- Easy interpretation of data through graphs
- To gain better insights on data

I. POD (patient on drugs)

Patient on drugs represents the number of patients who are taking a particular drug. The pipeline for each analytics are different . POD analytics includes filters such as the Market segment , period count, Age and gender ID . POD page includes two stacked bar charts to represent the drugs which are taken by the patients and the period in which the drugs are being taken . The legends include the values such as Active , Passive so this represents the active number of patients intaking the medicines and passive number of patients in taking the medicines. Each graph holder provides the feasibility to edit the name of the graph and the graph can be viewed in the minimized and maximized form . Each graph includes the filter to provide the options that are only applicable for the respective graphs.

POD includes a settings button which allows the user to visualize the same data through different graphs such as the line chart , Grouped bar chart etc. includes a settings button which allows the user to visualize the same data through different graphs such as the line chart , Grouped bar chart etc.

On hover of each graph the respective graph values are represented .The page is also provided with the download button to provide the user with the feasibility to download the graph. Patient on drugs represent the number of patients currently taking up the medication. The data from the hive tables are passed to the elastic search and based on each project id the required filters are selected which has to be sent to the UI for the representation in the filter bar .

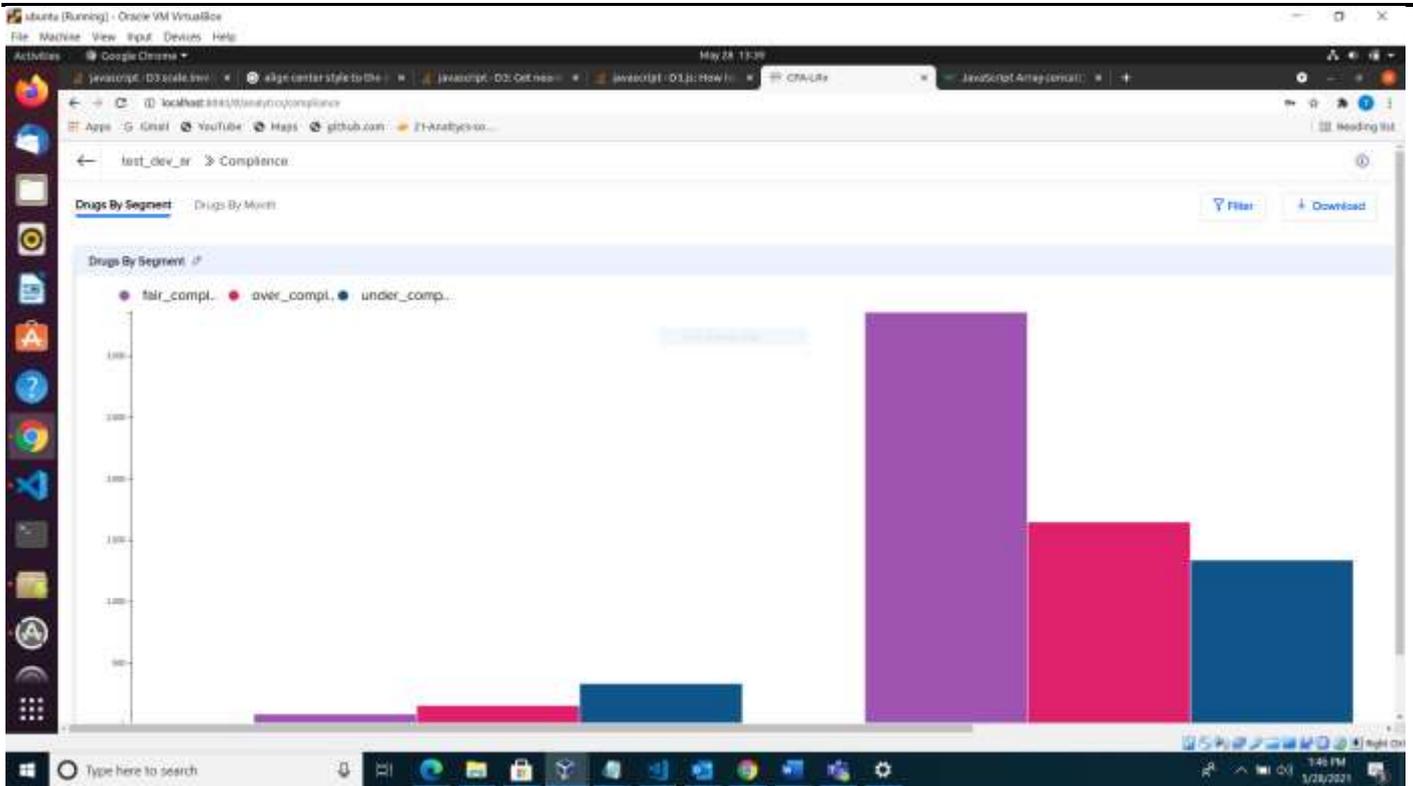


II. COMPLIANCE

Compliance is an another page of analytics which comprises of two graphs such as Drugs by segment and Drugs by month . Incase of Drugs by segment the various drugs are being represented on the x axis and the respective patient count are represented on the y axis whereas in case of Drugs by month for each particular period the patient count is being represented . The filters in case of the compliance include the market segment , period , Age , gender and the parameter details . on hover of each graph the tooltip represents the respective values of the graph and the graph holder has a edit button to edit the name of the graph and maximize and minimize buttons are provided to view the graph in maximized and minimized form . Through the settings button the type of graph can be changed to line chart , grouped graph etc.

The data from the hive tables are passed to the elastic search and based on each project id the required filters are selected which has to be sent to the UI for the representation in the filter bar . The values are sent from the elastic search to the UI through the API call which is represented in the filter sidebar for the user to have interaction with the graphs .The user has the feasibility to switch between various graphs such as line graph, grouped bar chart etc. so that the data can be visualized in the multiple charts to provide a better insights on the data.

Each graph holder has a sub filter option on the graph which has the options that only belongs to the respective graphs .



III. LOT (LINE OF THERAPY)

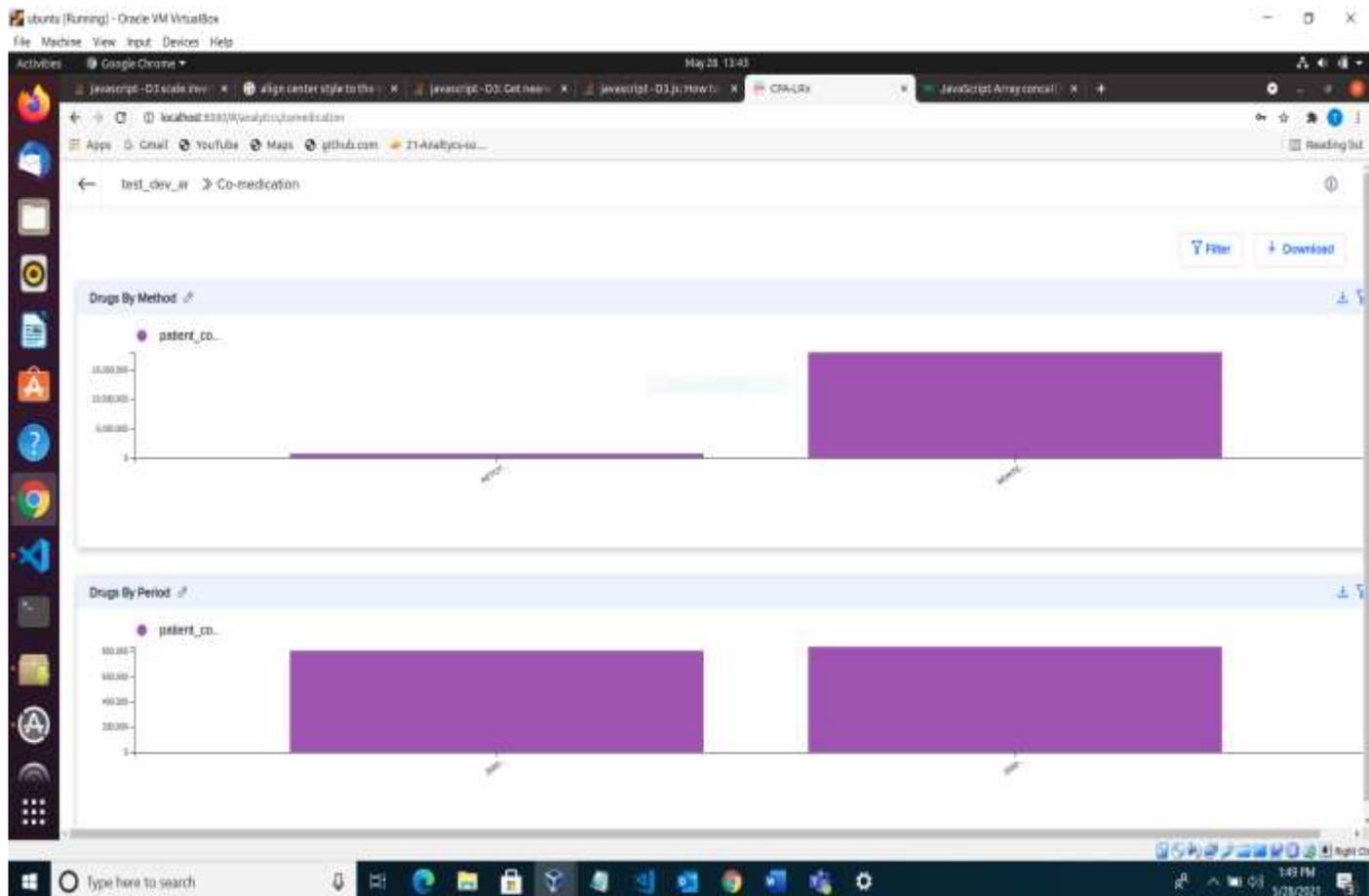
Line of therapy is based on the effective treatment for a patient for a particular diagnosis based on the stage of severity . Line of therapy analytics page includes graph such as Km curve and box plot. Incase of km curve the x axis includes the periods and the y axis includes the number of patient . on hover on each graph the corresponding period value and the patient count is represented on the graph . Through the Km curve we can easily interpret the decrease or increase in the number of patients on a particular month In case of Km curve the legends are basically the market segment values . The data from the hive tables are passed to the elastic search and based on each project id the required filters are selected which has to be sent to the UI for the representation in the filter bar. The values are sent from the elastic search to the UI through the API call which is represented in the filter sidebar for the user to have interaction with the graphs .The user has the feasibility to switch between various graphs such as line graph, grouped bar chart etc. so that the data can be visualized in the multiple charts to provide a better insights on the data.



IV. COMEDICATION

Comedication analytics page represents the number of medications that are taken together. The filters includes the methods which has two category unique comed and unique market segment , period , Age , gender and units which includes two categories such as DOT and patients . The values are sent from the elastic search to the UI through the API call which is represented in the filter sidebar for the user to have interaction with the graphs .The user has the feasibility to switch between

various graphs such as line graph, grouped bar chart etc. so that the data can be visualized in the multiple charts to provide a better insights on the data. Comedication helps us to understand what medicines taken together have a better result. Comedication has two categories drugs by segment and drugs by month.



V. SOB

Sob is another analytics page in the application where it includes gender distribution, geographical distribution and various other distributions. Sob page also includes various graphs such as boxplot heat map, pie chart and stacked bar chart. The values are sent from the elastic search to the UI through the API call which is represented in the filter sidebar for the user to have interaction with the graphs. The user has the feasibility to switch between various graphs such as line graph, grouped bar chart etc. Country patient analytics project management dashboard is an application which is designed to visualize large volume of data which is run through a spark job. The dashboard helps to gain better insights about the project and to make the appropriate business decisions. It helps the user to gain a better understanding about the project flow. The graphs are designed using D3 javascript where there are various filter options are provided for the user to have a better interaction with the graphs. On each selection of the filter, the graph changes accordingly. The different kinds of charts that are used in the application are bar charts, stacked bar chart, heat map, pie chart, Box plot, Km curve etc. The spark job is run at the backend and through the API call the respective filters are sent to the front end by filtering at the ES (elastic search) level, the received filters are used in filter tab through which the user can have the interaction with the graphs.

CONCLUSION

These dashboards catch information about project execution and achievement accomplishments, and transform it into a simple to-check show, so you rapidly realize how to push ahead. Most undertaking the board programming contributions incorporate a dashboard device. Announcing and undertaking following are regularly center highlights of PM apparatuses, offering visual reports or dashboards so supervisors can see things like task status, costs, and other key data initially. Undertaking the executives dashboards give a speedy outline of group progress for you and your partners. These dashboards catch information about project execution and achievement accomplishments, and transform it into a simple to-filter show, so you rapidly realize how to push ahead. Most undertaking the board programming contributions incorporate a dashboard apparatus. Revealing and task following are frequently center highlights of PM devices, offering visual reports or dashboards so directors can see things like undertaking status, costs, and other key data initially.

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