INTRODUCTION:

The title “Cloud data analytics for women security” outlines a map based application that uses cloud to analyze data. The main objective of the project abides the phrase “An ounce of prevention is worth a pound of cure”.

A 2012 UNICEF study found more than half of Indian adolescent males think it is justifiable to beat a wife under certain circumstances. Outside the household, crimes against women in India are also on the rise, and the evidence is shocking.

In July 2012, a young female student was molested and groped by a group of at least 18 men for 45 minutes in the north-eastern state of Assam. People watched and filmed the incident, but no one helped. Most are never reported because of the stigma surrounding rape. New Delhi rape exposes the perils of being a woman in India.

Earlier in August 2015, the arrest of over 370 people and detention of around 2400 who are alleged to be habitual eve-teasers and stackers in just 20 days initiative launched by Delhi police, has once again thrown light on the extent of harassment that women have to face in street of national capital.

Worse still, many more go unreported because a large number feel insecure about reporting rape or even sexual harassment to lawmakers, either because they are not taken seriously or because in several cases the protectors have turned perpetrators.

Hence, today security for women has become crucial. Therefore this project apprises to take preventive steps to keep us away from the dangers to a greater extent.

OBJECTIVE:

Even though there are many applications and NGOs which are serving for women security, the harassment rate hasn’t come down. Compared to other countries, in India there are no severe actions taken against the accused, either the judgment will be prolonged or the case is dissolved. We as a public sector are taking initiative out of need for the safety of women by making this application which keeps the victim anonymous to prevent mental trauma from society. It motivates people to come forward and take a stand against the harassment.
METHODOLOGY:

1. Application provides two services: View & Report.
2. On Report, the user enters the input data (location, crime-type, description) using the mobile application.
3. This input data is updated in MySQL database server located in OpenShift cloud through JBoss application server.
4. On View, the user enters the input data (location) from application. This location will be retrieved from the MySQL database server and it will be viewed in the Google map.
5. The analysis is done periodically by the admin.

6. The database in Open Shift is converted to .csv format and exported to the local system.
7. This file is transferred into HDFS in AWS using FileZilla.
8. This file is subjected to analytics using Mapper & Reducer programs and the output of this is converted to .csv using php code and stored in local system.
9. This analysed .csv file is imported to MySQL DB in OpenShift through JBossAS.

CONCLUSION:

As the proverb says “Precaution is better than cure”, it’s always better to be aware of the dangers of the places before visiting them and refuse to become a victim. This application provides a statistical data to an individual who wish to take precautionary measures before
travelling to a particular place. The objective of this application is to keep the user anonymous so that she can come forward to report the crime without being conscious about her identity.

**FUTUREWORK:**

1. The application can be enhanced in such a way that it notifies the admin each time the user reports a crime. Hence based on the number of crimes reported, the admin can update the Google maps rather than updating it on weekly or monthly basis. This improves the accuracy of Google maps to a greater extent.
2. Currently this application holds good only for Bangalore region. It can be made available world-wide to spread the awareness about safety levels.
3. It could be possible to do the analytical computations in the cloud automatically hence minimizing the human intervention, time saving and also improves the accuracy.
4. As the intensity of the crime reports increases, it is possible to assign a separate server for database itself and another for computational purpose. This can boost up the analysis process to some extent.
5. There is still an urgent need to strengthen the evidence base as many countries still lack reliable and meaningful data. So we can share our application’s input data with the concerned authorities and help them take the right security measures to make this world a better place for women.