Crime Information Management System for Sri Lanka Police

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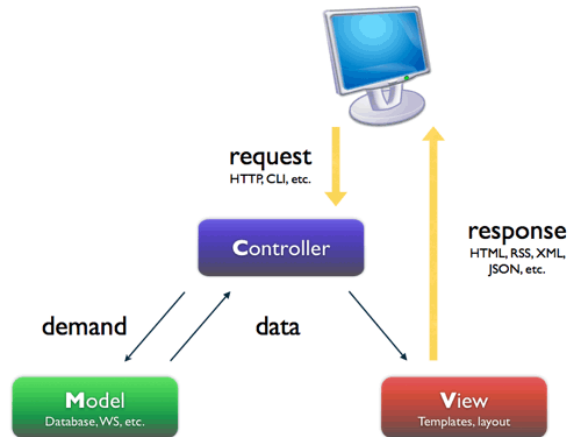
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The Sri Lanka Police is a Legal organization in Sri Lanka, and safe guard the people and country in various illegal activities. In a one single police station, it has several divisions such as Traffic, Crime, Child & women. They serve many people in a single day. Currently they manage their works in Manual System by using lots of big books and records Because of that, citizens are not happy about the Sri Lanka Police's day to day activities. Mostly this process is not Efficient, not accurate, take long time for small works owing to the lack of access to previous records.

Their manual system consists of many problems. They have been continually suffering to generating reports, maintain Crime, Criminal, Complaint details etc. As a result, the Head of the station, Officer in Charge (OIC) of the Crime Division was facing problems like data redundancy, data inaccuracy and delay in decision making due to unavailability of timely reports and information.

The proposed Crime Division Automation System addresses key issues at Sri Lanka Police by providing a mechanism to help administrative decisions and information of the specific crime situation efficiently and accurately. In general, criminals always use the same way to (technique) do their crimes or illegal actions. If these is proper historical data, criminals can be tracked very easily. Also, all the crime division complains are finished through the court decision. In order to find next court hearing, and for generating reports also become easy. Avoiding lot of big books, the system tries to provide accurate and efficient historical data.

This solution would help the people by producing many king of usual reports, tracking criminals and manage crime records, manage complaint details and etc. Using the system, essential information can be shared every related to crimes among the relevant authorities.

The Crime Division Automation System was developed according to the Rational Unified Process model which supports Object Orientation and iterative development. The system architecture is MVC and it was developed using PHP, Java Script, Ajax and MySQL as the database server. CodeIgniter as the PHP framework, JQuery as the JS framework, Bootstrap as the CSS framework being used. The Object Oriented methodologies and Even Driven methodologies were used. In designing diagrams MS Visio 2016 were used. As for the report generation mPDF was used.

MVC Architecture:

Model **V**iew **C**ontroller or **MVC** is more popular web base system design pattern. This is very useful as a security mechanism since it separate system into three major parts.

Model - The lowest level (or database) of the pattern which is responsible for maintaining data.

View - This is responsible for displaying all or a portion of the data to the user.

Controller – This segment controls the interactions between the Model and View.

User see everything via *View* sending request to the *Controller*. *Controller* check the request and check any data request to response, if any, then through the *Model* select data from database and send it to the controller, *Controller* load the relevant view to user.

As the future scope researchers wish to generate crime maps using historical data. Also generate various kind of analyzing charts, add a functionality to System provide, some analysis and update information about historical data like select Most Wanted. If opportunities are offered it is very easy to the researchers for automating all the divisions.

Key Words: *Crime, Web Base, Object Oriented, MVC, Rational Unified Process*