Ministry Category : NCPCR

Problem Statement : Implementation of Protection of Children from Sexual Offences (POCSO) Act, 2012

Problem Code : #NCP7

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In order to cater the lack of provision for NCPCR to monitor FIR details filed under Protection of Children from Sexual Offences (POCSO) Act. We propose to design a common platform which will provide real-time information regarding POCSO cases from all over the country. This will not only provide the case related data but also trends of such crimes.

Our proposed solution will consist of interactive GUI-based Web Platform with real-time data being updated as per problem statement. The system will have a filter mechanism which will filter out cases under POCSO Act, from the common database maintained at the SP (Superintendent of Police) office. This filtered data will be stored in a database owned by NCPCR. Our system will also provide features to categorise cases on the basis of filters like section, age and gender, zone and time. Based on different requirements employees of both SCPCR and NCPCR can view details of any case. Also, there will be databases for each SCPCR which will maintain cases of their respective state. Modifications of any detail will be governed by NCPCR.
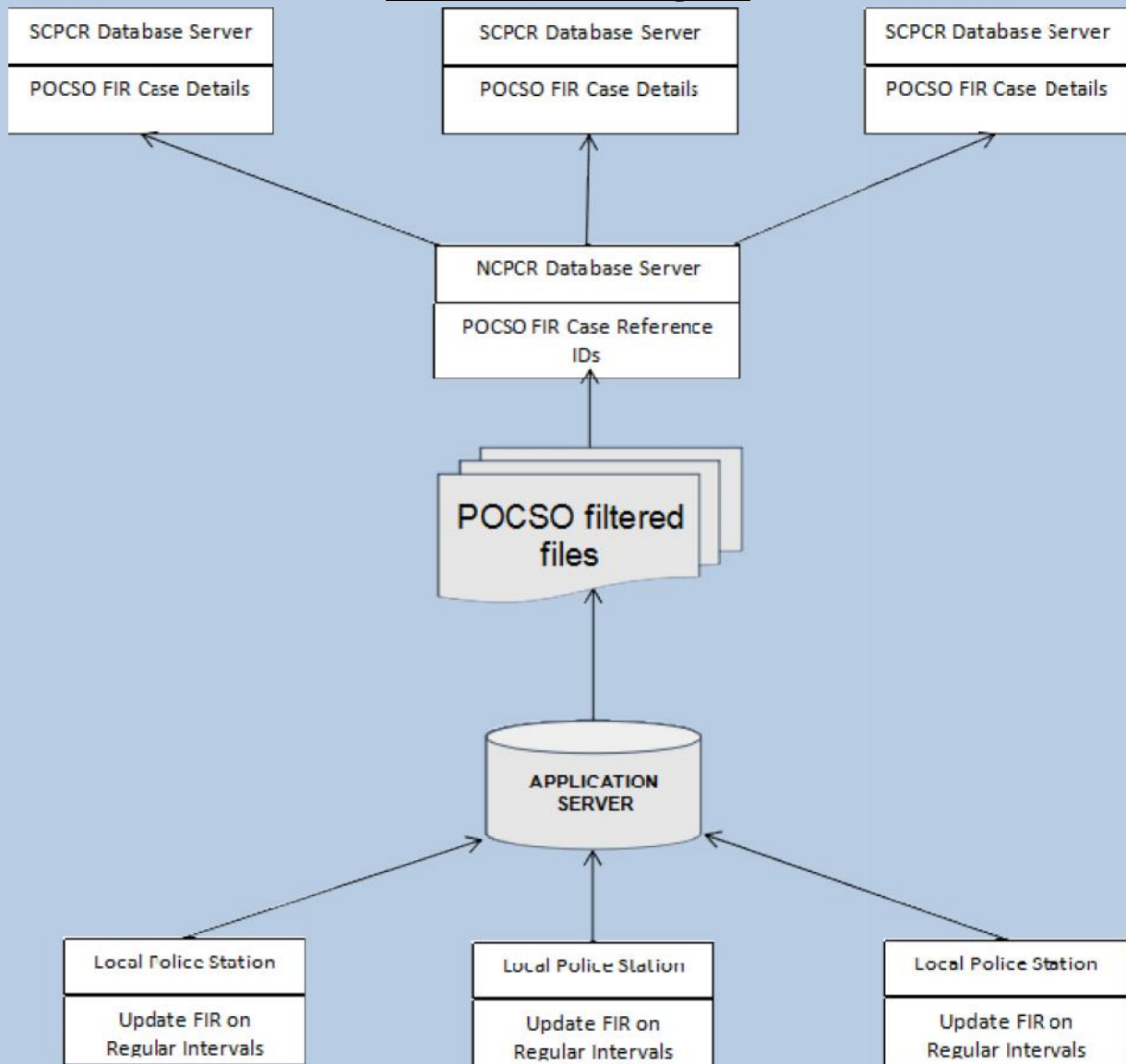
TECHNOLOGY STACK

SERVER SIDE: BACKEND
1. Web framework
2. Programming language
3. Web server
4. Database
5. O.S.

CLIENT SIDE: FRONTEND
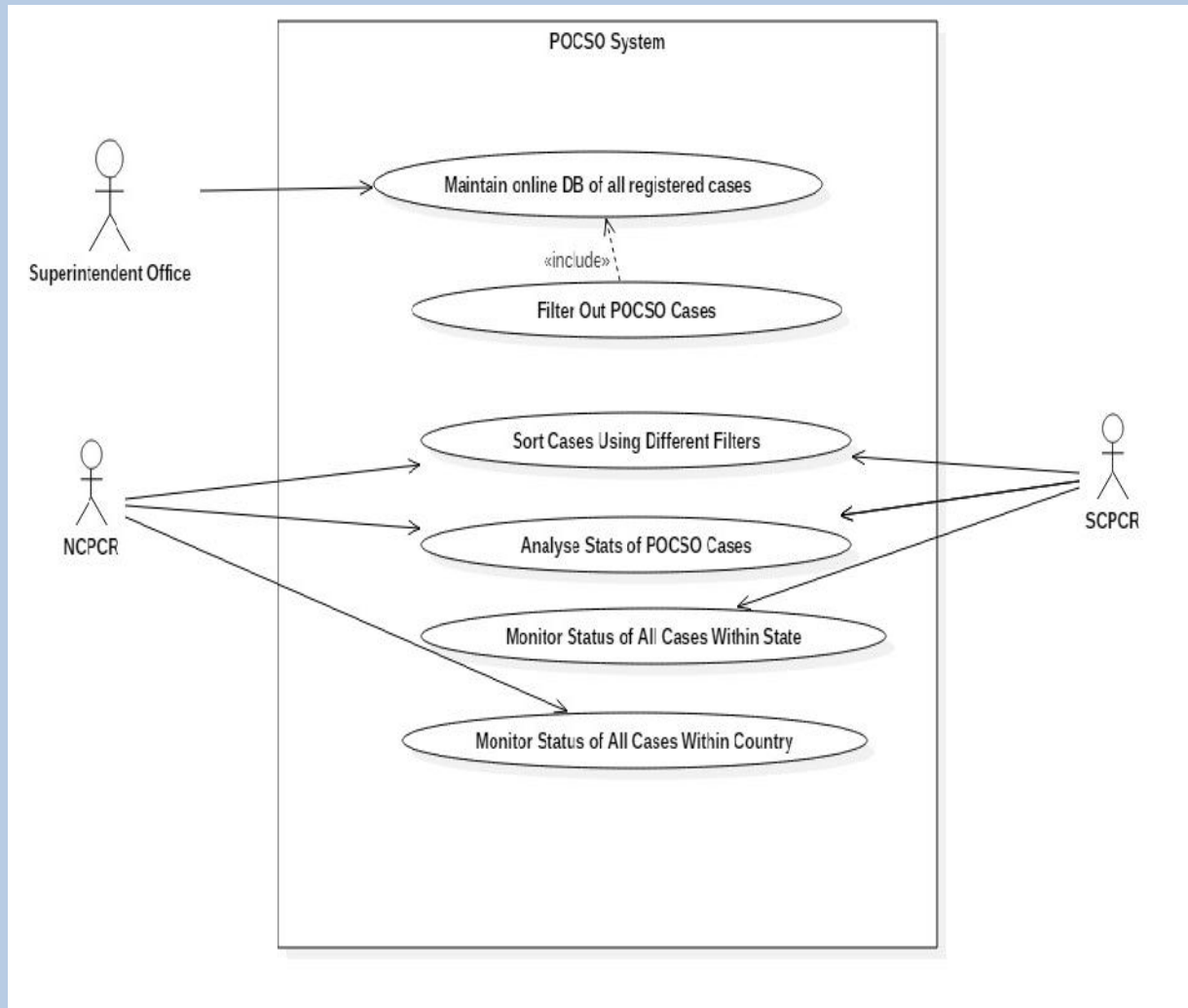1. Browser
2. JavaScript
3. HTML
4. CSS
5. PHP-Database query

Use Case/UML Diagram

SCPCR Database Server	SCPCR Database Server	SCPCR Database Server
POCSO FIR Case Details	POCSO FIR Case Details	POCSO FIR Case Details

NCPCR Database Server
POCSO FIR Case Reference IDs

POCSO filtered files

APPLICATION SERVER

Local Police Station	Local Police Station	Local Police Station
Update FIR on Regular Intervals	Update FIR on Regular Intervals	Update FIR on Regular Intervals

Fig 1: Architectural Structure

The above figure describes the structure of our proposed solution wherein the FIR cases registered will be uploaded at regular intervals manually by the person in charge of updating the records. The application servers will then filter out POCSO related cases and send the data to NCPCR office.

Here the database will contain details of the case (i.e. location, date, time, age and gender of the victim and offender). At the same time the data will be updated in SCPCR servers and backup will be created periodically.

Fig 2: Use Case Diagram

The above figure represents the use case diagram for our proposed solution. The actors involved in the functioning of our system are: SP Office, SCPCR and NCPCR. Every actor is mapped with the actions that they will have to execute in order to ensure the smooth functioning of the system.

Dependencies

- If the person in charge of updating the records of registered FIRs is not diligent, it will affect the performance of the proposed system since real-time data will not be generated to be filtered and forwarded to SCPCR or NCPCR.
- Internet connectivity.
- Application Server database