## A RESEARCH REPORT ON THE DATABASE AND ERD DESIGN FOR A MOBILE APPLICATION SUPPORTING GENDER-BASED VIOLENCE (GBV) REPORTING AND MANAGEMENT

This report describes the database for a mobile application developed to support the reporting and management of gender-based violence (GBV) cases. The main goal of the system is to help survivors and witnesses report incidents, receive support from relevant organizations, and enable administrators to manage the reports and services effectively.

The system allows users to create reports about incidents of violence, which are then managed by administrators. These reports can be linked to different support services such as hospitals, police stations, legal aid centers, and counseling organizations. Users are also able to give feedback on the assistance they received. If needed, the report can be referred to an external organization for further support.

The database is made up of several main entities (tables). The 'User' table stores details of the people using the system, including their name, contact information, location, and role. The 'Admin' table holds the data of system administrators who manage the reports and assign services. The 'Report' table keeps the details of incidents reported by users, such as the date, time, location, and status of each case.

The 'Support Service' table contains the list of organizations available to provide support. Because a single report can require help from multiple services and one service can help with many reports, a separate table called 'ReportSupportService' is used to link them together. Feedback from users is stored in the 'Feedback' table, and any referrals made to external organizations are tracked in the 'Reference' table.

The relationships between the tables are structured to reflect the real-world flow of information. A single user can create multiple reports and provide multiple feedback entries. Each report is assigned to an admin and can be associated with many support services. Each support service can also be involved in many reports. One report can have several feedback entries and may be referred to multiple external organizations.

For example, a user reports an incident of violence through the mobile app. The admin receives the report and assigns it a status, such as 'Pending' or 'In Progress'. The admin also connects the user with relevant support services. After receiving help, the user can leave feedback about their experience. If necessary, the case can be referred to another organization such as the police or a hospital for further action.

Future improvements to the system could include adding user authentication with login credentials, enabling messaging between users and support services, integrating a map feature to show incident locations, and adding a dashboard for statistical analysis and summaries of the reports.