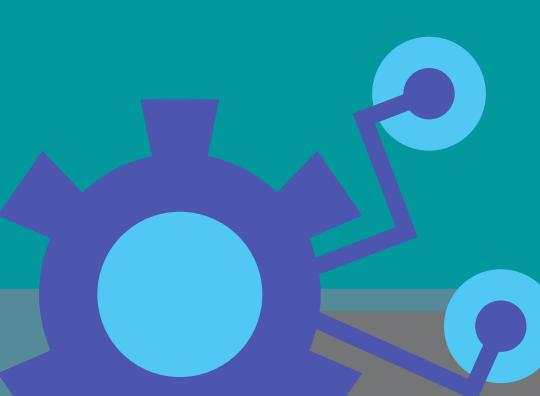


WEB-BASED DATABASE AND SPATIAL DATABASE MANAGEMENT SYSTEM: APPLICATION OF DISABLED PERSON IN PHETCHABON PROVINCE

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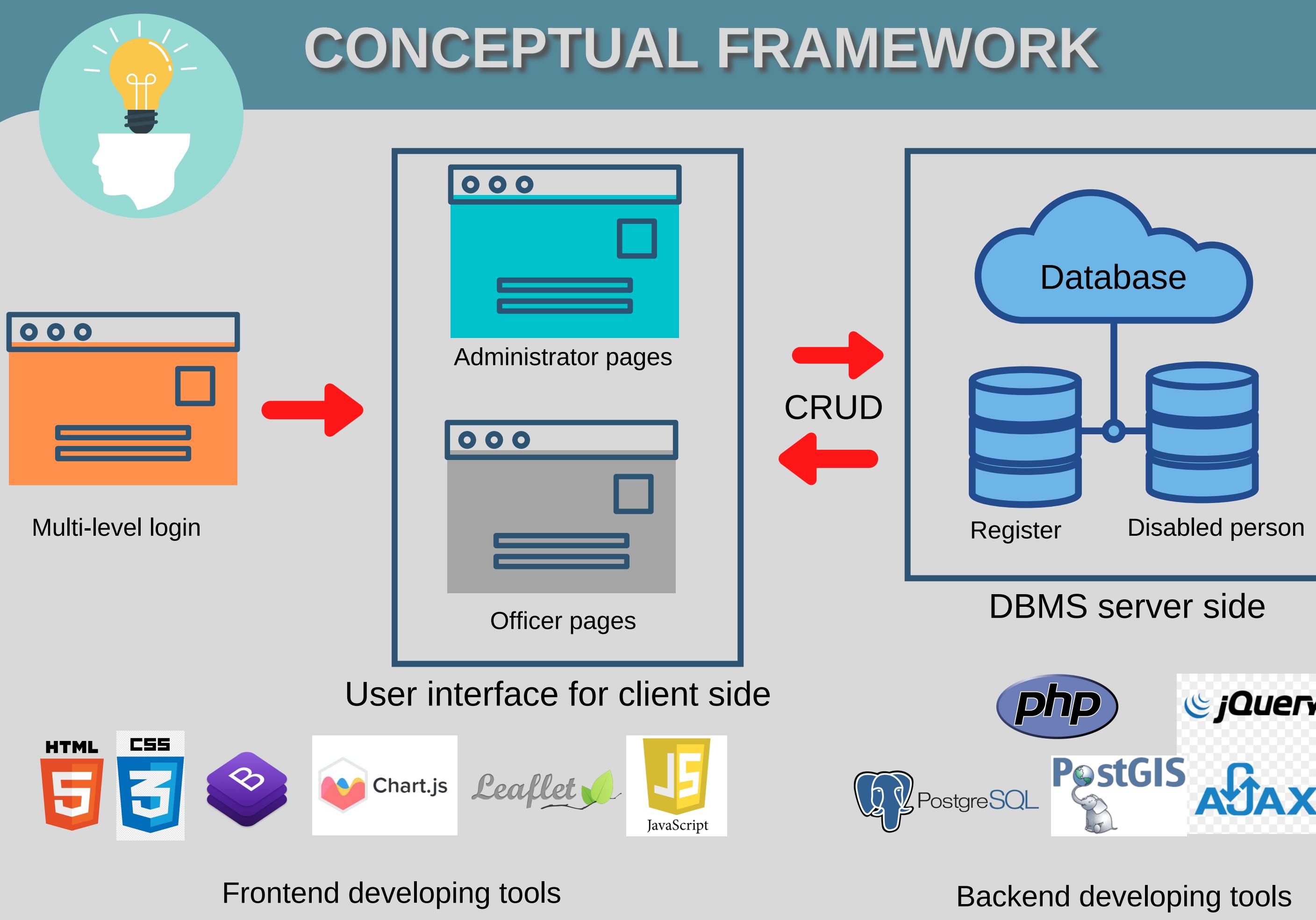
ABSTRACT

Nowadays, widely used data warehousing technology is mostly due to its most efficient, easy-access, and analyzable. So, this work presents the approach to developing the service-oriented web-based application with spatial thinking of disabled persons quantitative. The Web-based database management system is one of the essential parts of Database Management System (DBMS) and is used to store web application data. A web-based database management system is used to handle those databases that are having data regarding E-commerce, E-business, blogs, e-mail, and other online applications. Not only has DBMS been implemented but spatial DBMS also has developed. Spatial DBMS can display, query and manage data in a Map format. This solution helps the care manager or disabled personal assistants (PA) manage the disabled person information as the database with the create, read, update, and delete the data (CRUD system) through Website. The application wasn't used only for data storage but also it was reflexed the disabled person needs e.g., job finding, PA-disabled person matching, the disabled person mapping, and summarizing the information. The hypertext preprocessor (PHP), JavaScript, CSS, PostgreSQL/PostGIS were used as the backend process of this application, through the hypertext markup language (HTML) with Bootstrap as the frontend development. The web mapping application using Leaflet and showing the summaries disabled person qualitative of each sub-districts, districts, or province. This solution could increase the disabled person database management and motivate the data analysis for better policy in the future.

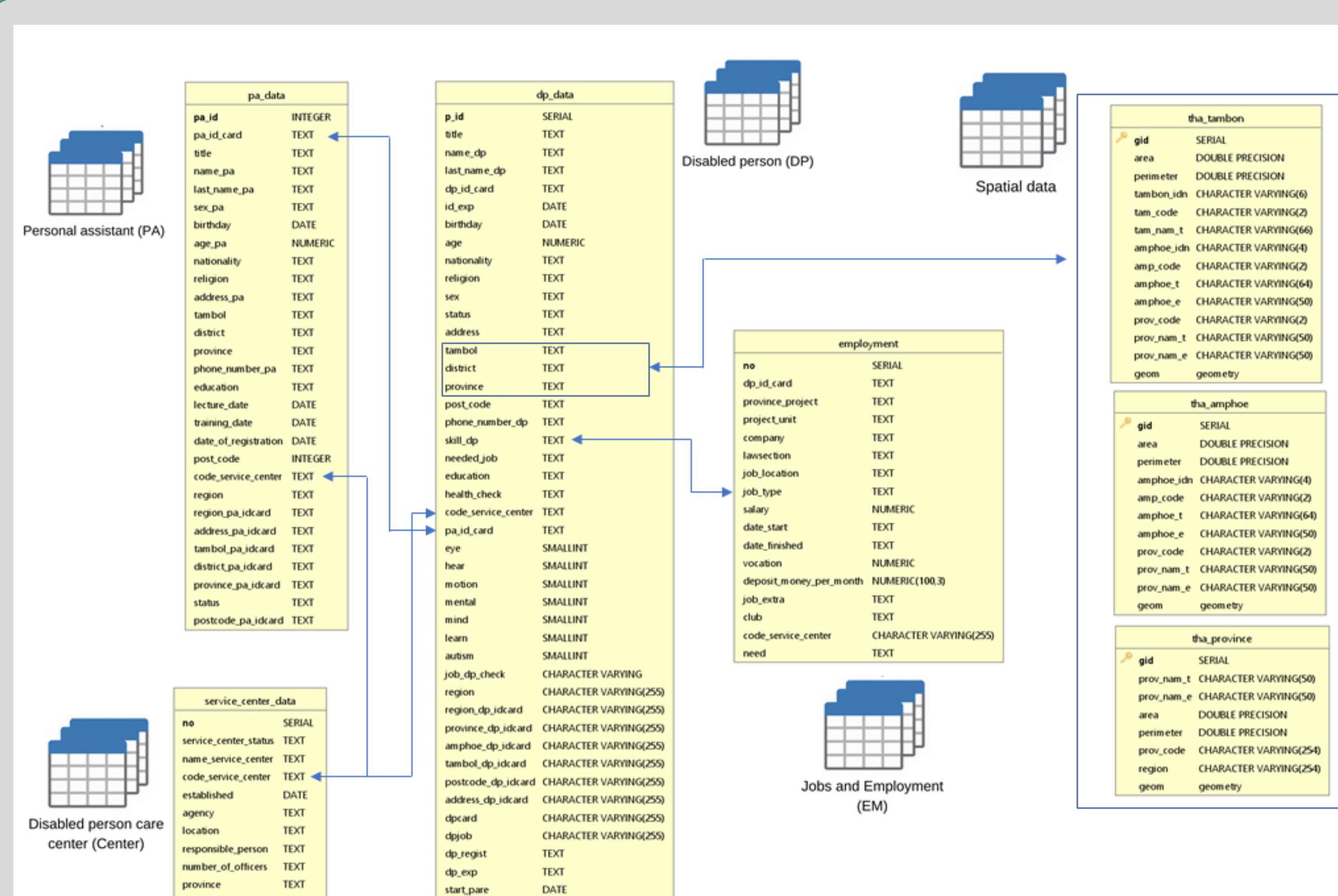
OBJECTIVE

To developing the service-oriented web-based application with spatial thinking of disabled persons quantitative

CONCEPTUAL FRAMEWORK



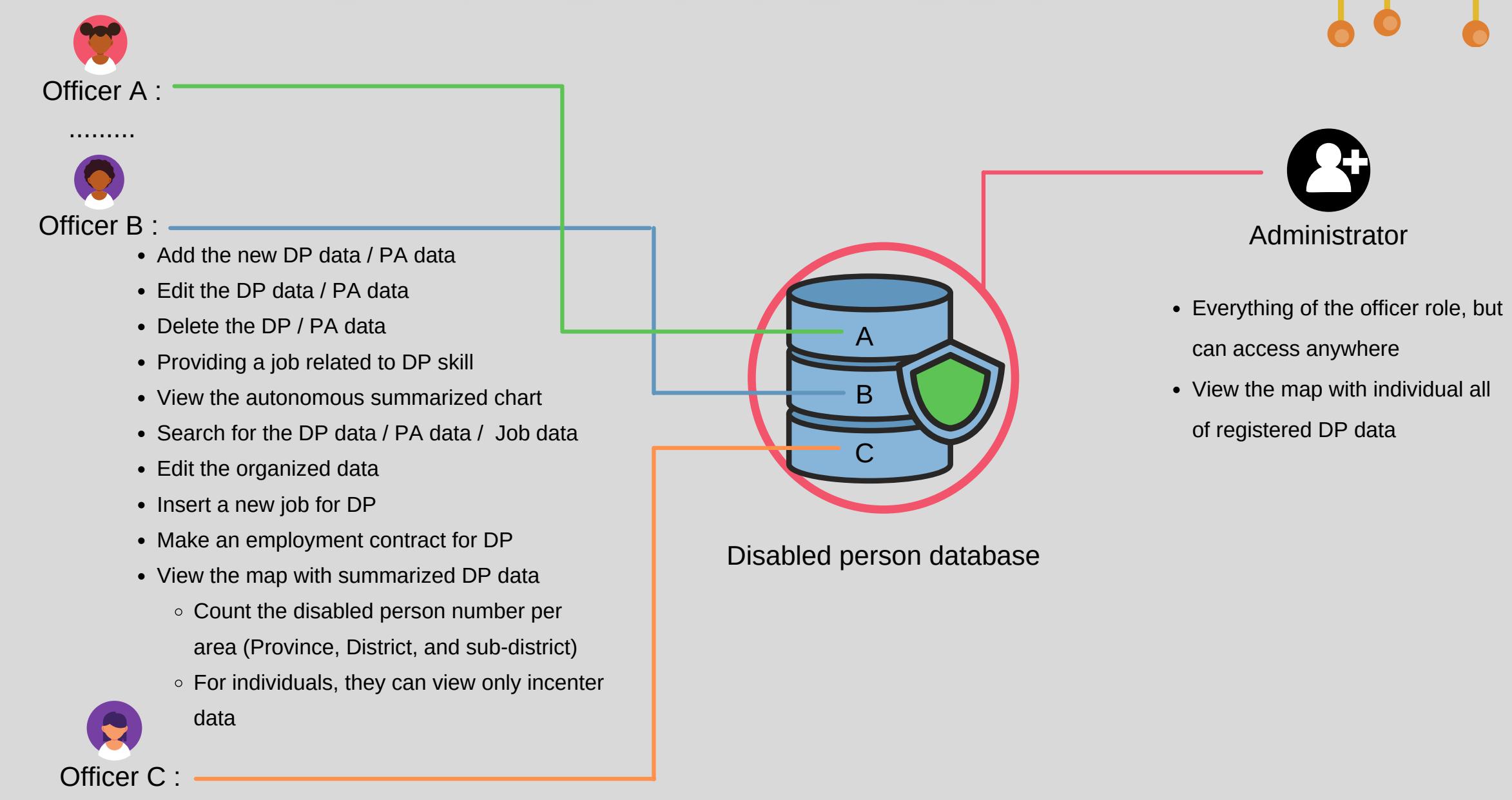
DISABLED PERSON DATABASE DESIGN



CONCLUSION

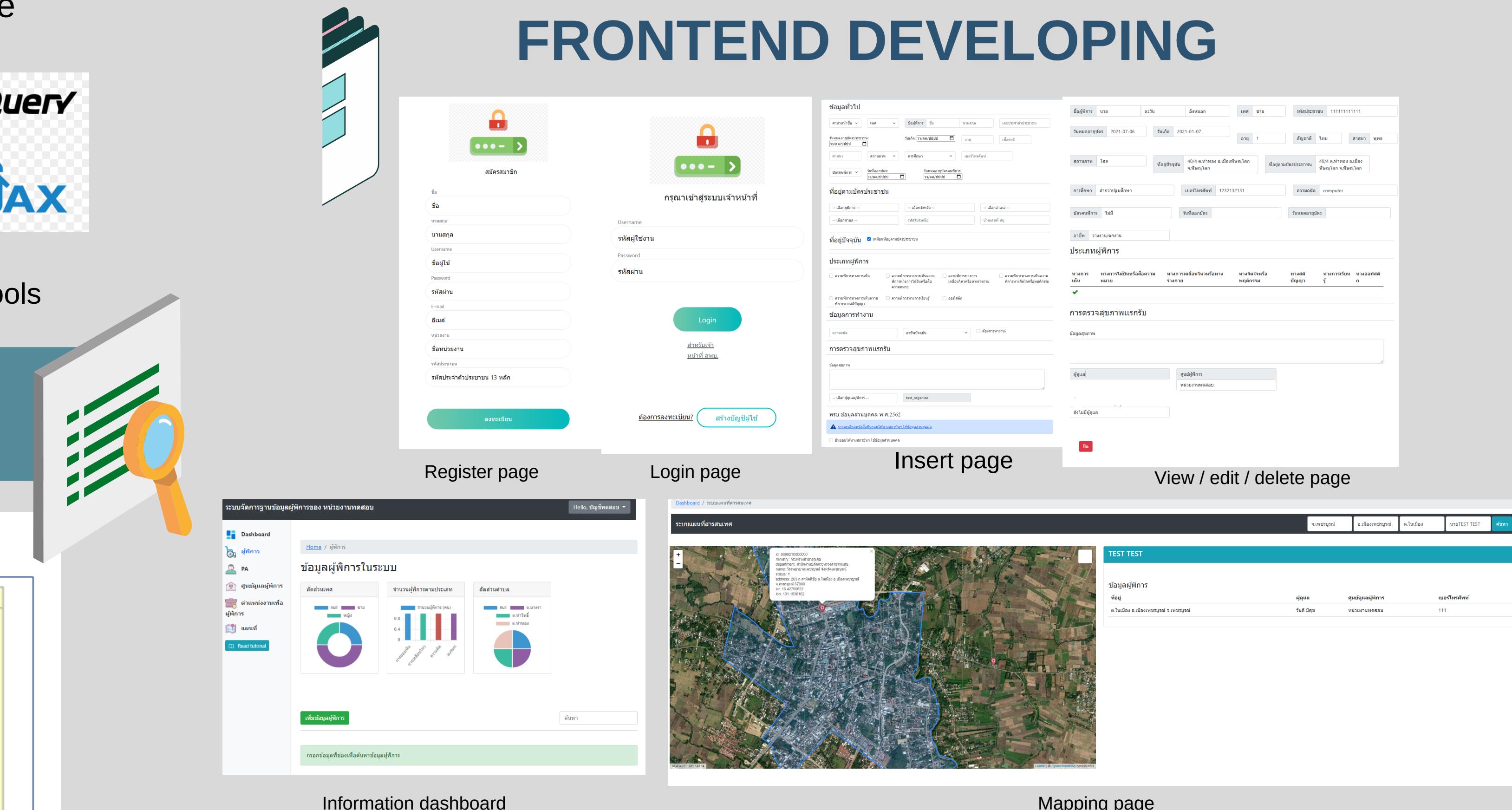
A web-based database and spatial database management system for disabled persons in Phetchabun province was developed in this work. We designed a database to handle the disabled person information and the spatial database for the non-technician users. The backend and frontend were developed using the open-source library while showing effectiveness. This application presented the approach to spatial thinking for the decision support system.

BACKEND DEVELOPING

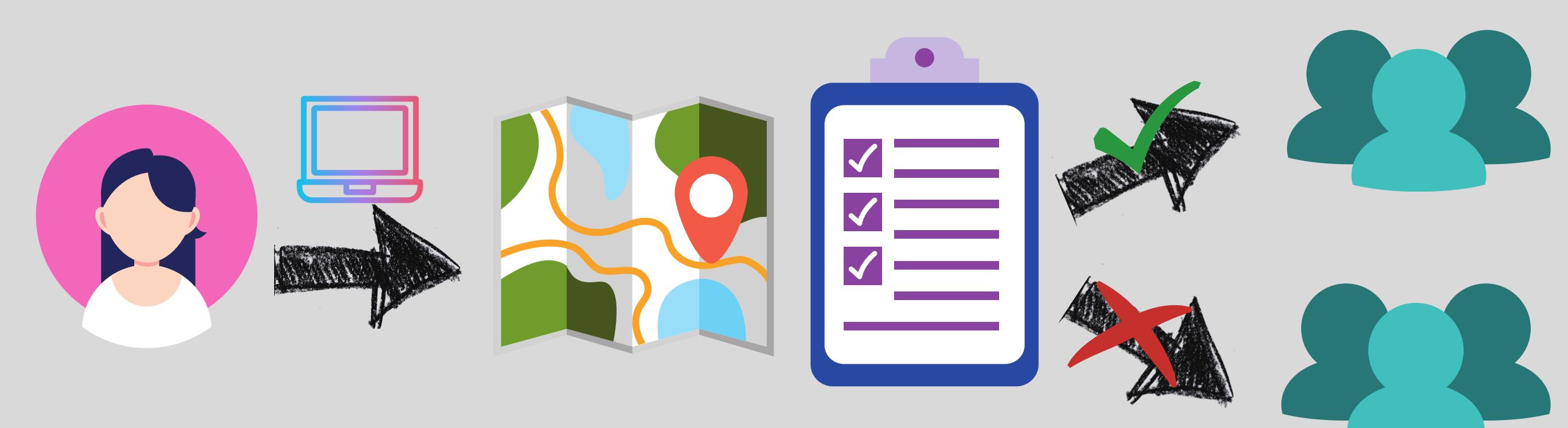


- Many tools were applied to this work including AJAX-jQuery, PHP, and SQL for developed the CRUD system.
- PostgreSQL/PostGIS was used as the spatial mapping tool.
- The registration system was designed using object-oriented PHP with SQL.

FRONTEND DEVELOPING



- This application helps the officer and administrator can managing the data everywhere through various device types: smartphone, tablet, and personal computer



This work contained geospatial and non-geospatial information. The geospatial information is used for spatial thinking to planning the policy that might suitable for each area.

ACKNOWLEDGEMENTS

The authors thank Reoriented holistic health service delivery institution and the National health foundation for financial support.