

PERAK e-SCHOOL FINDER USING GEONODE PLATFORM

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ABSTRACT

Perak e-School Finder using GeoNode platform

The "Perak e-School Finder" project, developed using the GeoNode platform, aims to provide a comprehensive and user-friendly solution for locating high schools (SMK) in Perak, Malaysia. By integrating geospatial technology, the platform enables precise mapping of school distributions across various Education District Offices (PPDs). The project involved extensive data searching, collection, and processing to ensure accuracy and reliability. Key data sources included publicly available documents and databases, which were converted into spatial data for visualization. The platform features an interactive map, detailed attribute tables, and visual aids such as pie charts and bar charts to facilitate easy navigation and interpretation of school information. This innovative tool not only streamlines the process of finding schools but also enhances decision making for educational planning and resource allocation and accessibility in education within Perak.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

In the initial phase of this project, the process began with an extensive search for relevant data sources using Google Chrome. This powerful web browser facilitated access to diverse online databases and repositories, aiding in gathering detailed information about high schools (SMK) in Perak categorized by their respective Education District Offices (PPD). The search focused on finding comprehensive lists and pertinent documents providing insights into school locations and administrative classifications within Perak. This approach ensured a solid foundation of data for subsequent steps such as data acquisition and processing crucial for accurate visualization and meaningful analysis of geographic data.

In addition to gathering data, this study conducted a review of existing studies and websites utilizing similar data search methodologies. Various educational platforms and applications, including "e-School Finder" and similar school locator tools, illustrate the potential of integrating geospatial technology with educational data. These platforms commonly employ Geographic Information Systems (GIS) and data visualization tools to offer interactive maps showing school locations, alongside details such as institution type, size, and administrative information (Allan et al., 2020). Existing studies on educational platforms underscore the importance of integrating spatial data with educational information to enhance decision making processes. For instance, the "e-School Finder" application features a user friendly interface enabling searches based on location, institution type, and available amenities. It utilizes GIS to generate detailed maps that visually depict the spatial distribution of schools (Moore & Carpenter, 1999).

Such applications often include additional functionalities like filtering capabilities, comprehensive school profiles, and user reviews, providing a holistic overview of each educational institution (Dwivedi et al., 2021). These existing platforms highlight the significance and effectiveness of combining spatial data with educational information to enhance decision-making processes. By examining these examples, this project aims to develop the "e-School