

Project Information

Project Name: Diskover++ Website

Development Team: Powerpuff Boys

Institution: Department of Computer Science, UP Diliman

Review Date: November 26, 2025

Name of Reviewer: Lucas V. Agcaoili

Name of Recorder: Aeron Dann P. Peñaflorida

I. System Overview

Purpose

Diskover++ is a web-based campus navigation and discovery system developed by students from the Department of Computer Science at UP Diliman. The platform provides an interactive way for users to explore campus locations through multiple navigation methods: search functionality, an interactive map with routing capabilities, and category-based browsing.

Key Features

- Advanced Search Functionality: Text-based search with category filtering, sorting capabilities, and tag-based discovery
- Interactive Map with Routing: Visual campus map with driving and walking directions
- GPS Integration: Real-time location tracking and current position mapping via GPS configuration
- Category-Based Browsing: Buildings, Rooms, Food Services, Parking Areas, Comfort Rooms, Jeepney Stops, Entrances and Exits, Landmarks, Offices and Facilities, PWD Access Points
- Nearby Locations Discovery: Context-aware location suggestions based on current position
- Drag-and-Drop Interface: Interactive location selection for route planning based on starting and ending position
- Feedback System: User reporting mechanism for broken links and suggestions

II. Software Review Results

Overall Performance Metrics (On Use Cases)

- Passed: 11 (92%)
- Failed: 1 (8%)

Feature Performance Breakdown

A) Search Bar Functionality

For the Search Bar Functionality, we tested key features: Home Page Searching, Category Filtering, Sorting, and Tags filtering.

For the Home Page Searching, the test is to search for different areas/buildings in UP Diliman. We tested Area 2, NIGS, and other popular places in UPD. The app was working well in regards to this functionality but we noticed a slight bug in the names of places that have long names. For example, the name of NIGS was cutout to National Institute of Geologica-.

For Category Filtering, the app was able to produce correct results based on the searched keyword.

For Sorting, there were four types of sorting available to the app: sorting by names in A-Z, Z-A, and sorting by recently and least recently added buildings. We tested all of them and the app worked well for all sorting types.

For Tags, there were two available tags which are Businesses and College Buildings. We tested via different inputs but the results did not change depending on the tags.

Overall, all use cases passed except for tags.

B) Map Feature

We tested for key features of the integrated map: Map Routing Drive, Map Routing Walk, Nearby Locations, and the Click and drag current location.

The Map Routing Drive or Walk functionality is basically like the GPS system of google where you give a starting and ending position and you will see in the map a route where you can drive or walk. During testing in the app, we noticed that sometimes the route goes out of the normal routes when doing it in person. In other words, some of the paths are not optimal. For example, in our testing from AECH to A2, the path diverges to a longer path while it did not get the most optimal path which is available for both driving and walking.

The Nearby Locations features essentially states all known locations given a certain location. No problems were found as all buildings necessary were given.

The Drag and Drop Location function changes the starting location by dragging and dropping the starting point indicator in the map while essentially changing the path to the destination. No problems were encountered during the testing.

C) GPS Tracking

For the GPS Tracking, A GPS Configure button is used to determine your current location and set it as a starting point whenever the user would want to learn the route to another destination. No problems were encountered during the testing.