



Tourist Guidance System – DISCOVER

Minor Project

Disclaimer

This Software Requirements Specification document is a guideline. The document details all the high level requirements. The document also describes the broad scope of the project. While developing the solution if the developer has a valid point to add more details being within the scope specified then it can be accommodated after consultation with IBM designated Mentor.

INTRODUCTION

The purpose of this document is to define scope and requirements of a Tourist Guidance System - DISCOVER for a leading State Transport Corporation (SRTC). The proposed system will provide tourists a simple and effective way to discover multiple nearby tourist destinations. It guides the tourist to select an optimum round trip journey plan to cover his/her desired destinations to either minimize (a) cost or (b) travel time.

This document is the primary input to the development team to architect the solution the project.

System Users

The prospective customers i.e. the tourist will primarily use the DISCOVER system. In addition, the administrative staff of the State Road Transport Corporation will also use the system to configure various route details that are used to discover the required journey plan.

Assumptions

1. The maximum number of destination will be limited to 6.
2. The data pertaining to the routes, along with cost and time details will be uploaded using a CSV file. To simplify further, it is assumed that there is only one bus service between a pair of city.

REQUIREMENTS

DISCOVER will assist tourists in planning a round trip optimum journey to cover his/her desired destinations to either minimize (a) cost or (b) travel time, while ensuring that s/he visits each destination only once during the journey.

Basic System Operation

The following set of operations outline as to how a tourist will discover the optimum journey plan for the desired destinations.

1. The system will allow the tourist to search and select a city as the origin of his/her journey from the list of available cities covered by the SRTC.
2. The system will allow the tourist to search and pick up to 6 destinations from the list of available cities covered by the SRTC.
3. The system will allow the tourist to either optimize his journey for travel time or travel cost. This is referred as the optimization objective.
4. Based on the optimization objective, selected destination and the origin, system will automatically discover the optimum journey plan while ensuring that each destination is visited only once. Such plan will be displayed in form of a list of cities starting from the origin and covering each destination in the

optimum sequence.

Bus Service Data Input

The DISCOVER software will receive the input in a CSV whose format will be as follows:

City1	City2	Travel Time	Cost	Bus Number
Kanpur	Allahabad	4	200	212
Allahabad	Kanpur	4	210	213
Varanasi	Allahabad	3	185	415
Allahabad	Varanasi	3	195	426
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Each row has data for one pair of city in terms of their names, travel time, and cost. A pair (city1, city2) indicates travel from city1 to city2. The CSV file will contain rows for every possible city pair that is serviced by the STRC.

The administrator will upload this data.

DEVELOPMENT ENVIRONMENT

DISCOVER will be developed as a web application using Java/JSP and DB2 database. Eclipse will be used as the IDE for the same.