

Project Proposal

CSE 403 – Software Engineering

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Introduction

Most of the calendars and planner applications available today only display a schedule which the user has manually planned. They do not offer any smart scheduling or schedule optimizing features to assist the user in planning their day, by presenting the user with an optimized itinerary. For our project, we propose the development of a smart day planner application, which provides the user with an optimized schedule, taking into account various constraints like appointment times, activity durations, activity locations, travel modes and distances.

Objectives

- To provide an easy to use application that acts like a personal assistant by providing user with an optimally planned day schedule.
- Optimize schedules taking into account various user constraints as well as other information like location of activities, their duration, and travel times depending on mode of transport (driving, cycling, and walking).
- Provide flexibility by re-computing an optimized schedule to accommodate change in plans by user.
- Provide access to schedule anytime and anywhere by syncing the day's schedule with a central server.
- Provide a web interface and/or Android phone application.

Target Customers

- Busy Parents – Both working and stay at home parents need to juggle various activities throughout the day, like work, children's activities, groceries, gym, etc.
- Students – In addition to school schedule, students also have to manage their extracurricular activities, work, social life, etc.

Value Proposition

This application fills the need of having a tool that plans and optimizes your schedule so that you can be more productive by focusing on the tasks at hand, and not be burdened with the details of planning. The absence of any schedule optimizing tools in the market will put this application in a unique position.

Application Features and Description

Requires user to sign in to access the tool via a web page (or Android application).

The user provides the events or task that need to be completed during a day. For each task/event the user provides following information which allows the system to build a schedule and optimize it:

- A name/title for the task or event
- Start time of the event, if it is not flexible
- Expected duration of the task
- Location of the task/event
- Priority of event on a scale of 1-5
- The time that the user wishes to start and end their day with a possible "all nighter" option