Project Proposal for CSCD 350 Spring 2024

TimeTracker

1.0

Team 4: Ghidra

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GitHub Repository:

https://github.com/Sanmeet-EWU/github-teams-project-bid-ghidra.git

Part 1: User Stories Based on the project description

U1 Precision Planning: As a busy professional, I want to be able to plan my entire day to the minute so that I can stay organized and productive.

U2 Event Reminder: As a parent, I want to be able to set reminders for my child's upcoming events so that I don't forget about them.

U3 Sharing: As a highly involved community member, I want to be able to share my calendar with my neighbors so that they can see when I am available and plan our home-owners association meetings accordingly.

U4 Custom Fields: As a student, I want to be able to add customizable data fields to my calendar events. Other calendar apps don't let me add custom fields such as "room number," "subject," "class code," and any other fields that would make it easier to manage and compartmentalize my schedule.

U5 School Due Dates: As a student, I want to be able to seamlessly integrate my assignments, due dates, and test/quiz dates from my learning management system into my calendar.

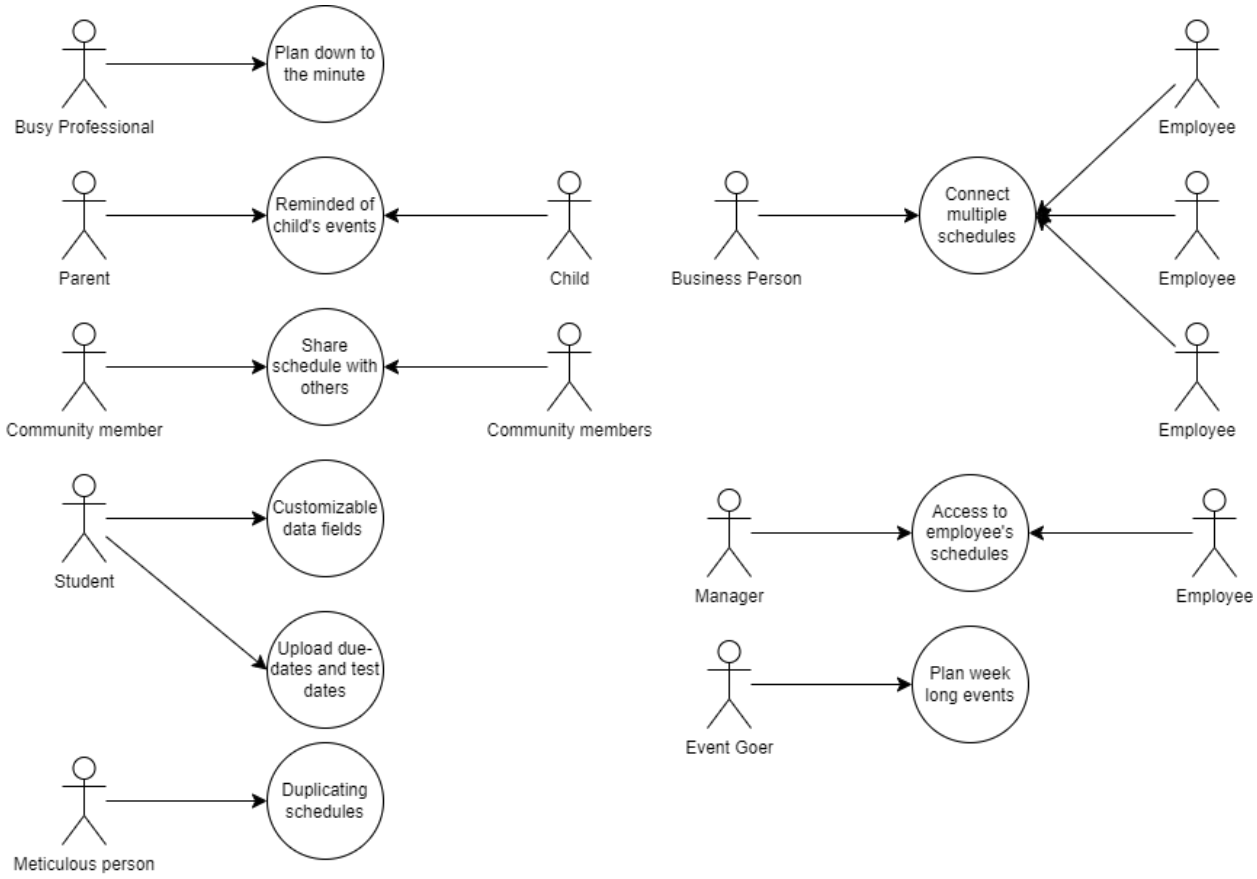
U6 Optimal Meetings: As a manager, I want to have simple and streamlined access to my employees' schedules. This would make it easier for me to schedule meetings on short notice; when I schedule meetings, the relevant employees should receive a notification about the upcoming calendar event.

U7 Long events: As an event goer, I want to have the ability to plan events that span several days so that I can track longer events.

U8 Combining: As a business person, I want to have the ability to connect several schedules together so that I can compile a single schedule to work with.

U9 Duplication: As a meticulous person, I want the ability to duplicate a schedule across the week so that I can have a standard daily routine.

Part 2: Use Case Diagrams



Part 3: Requirements and specifications

Requirements:

R1(U2): There shall be a feature to notify users a specified amount of time ahead of their scheduled events.

R2(U4,5): There shall be a feature to add a customizable the data fields

R3(U3): There shall be a feature to share a calendar with others

R4(U7): There shall be a feature to plan a single event across several days.

R5(U1): There shall be a feature to precisely plan a schedule down to the minute.

R6(U6,8): There shall be a feature to combine multiple schedules into a single schedule.

R7(U9): There shall be a feature to duplicate existing schedules to another date.

Specifications:

R1: The notification features shall use the device's existing notification system to notify the users.

R2: The customizable feature would allow the user to fully customize the data fields. A fully customizable data field consists of two strings, one to represent the name of the data, and another to represent the data itself.

R3: The share feature would allow the user to share links with others.

R4: The long event feature will produce a single event over several days instead of creating multiple events for each day. This feature will allow the user to specify a start time and end time that are not on the same day, the resulting event encompassing the entire time.

R5: The feature to precisely plan schedules down to the minute shall use the user's device to get the time. Internet-connected devices use Unix time, which is an extremely accurate standard. Our calendar app will leverage Unix time using the Date library in Java.

R6: The combined multiple schedules features will produce a single schedule. This feature returns a schedule that contains all of the events and the mutual unscheduled time of the constituent schedules.

R7: The duplicate schedule feature shall produce the same schedule without any errors or deviations from the original duplicated schedule. This feature will copy the events of one day across a user-selected range of days.

Part 4: Glossary

Application - A program designed to perform specific functions for the end user by interacting directly with it.

Calendar - A chart or series of pages showing the days, weeks, and months of a particular year, or giving particular seasonal information.

Data fields - Used to display variable data and to allow the user to enter data.

Duplicate - producing the same object for a specified number of times without any deviation from the original object.

Event - A thing that happens, especially one of importance.

Feature - A distinctive attribute or aspect of something.

Java - a multiplatform object-oriented programming language that powers apps, smartphone systems, and many other well-known programs

Library - a collection of pre-written code that can be used to perform specific tasks

Notification - a message that will display outside the app's UI to provide the user with timed reminders from the app based on their input

Plan - A detailed proposal for doing or achieving something.

Reminder - A written or message that reminds someone to do something.

Schedule - A plan for carrying out a process or procedure, giving lists of intended events times.

System - a set of things working together as parts of a mechanism or an interconnecting network.

Unix - portable, multitasking, multi user, time-sharing operating system (OS) originally developed in 1961 by a group of employees at AT&T.

User - a person who uses or operates something, especially a computer or other machine.