CAPSTONE INFORMATION

- Program: CPA
- Team Members: Nicholas Lee
                             Cynthia Cheng
                             Thomas Craig
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- Client: Circumference

- Name of Project: Sched

- Project Description:
    The purpose of this project was to develop an automated scheduling web application for field services

CLIENT REQUIREMENTS

Project Goal

- Create a scheduling web application for field services and improve automated scheduling process

- Primary user would be the Dispatcher scheduling work for field Technicians and Resources

Requirements

- Booking interface that allowed Dispatchers create, update, view, delete Work Orders

- Dispatchers can schedule and dispatch Technicians and Resources to fulfill Work Orders

- The process would utilize a Gantt chart where Dispatchers can drag Work Orders into Technician and Resource schedules

TECH REQUIREMENTS

ASP.net

MS Server Database

jsGantt Improved

PROJECT INNOVATIONS

- Recommendations of Technicians and Resources based on client outlined parameters for scheduling of Work Orders

- Single dashboard view, allowing Dispatchers to toggle different information they may want to view while completing scheduling

- An interactive visual experience for Dispatchers via being able to drag, drop, and move Work Orders on a Gantt chart to complete scheduling

OBSTACLES AND LESSONS LEARNED

jsGantt Improved Limitations

- An open source javascript library that creates a Gantt chart however required many changes to meet client requirements

What we did

- We updated and enhanced code to be used as a scheduler allowing multiple Work Orders to be assigned to Technicians and Resources, displayed in combined rows which displayed significant Work Order information on hover over time slots and drag functionality, allowing updating of Work Order time with a simple drag and drop

Bridging the Gap between List and Chart

- We could display the Work Orders that needed to be scheduled and could view the Gantt Chart but how do we link the two?

What we did

- We used Droppable to be able to grab data from the Work Order List and move it into the Gantt chart for scheduling

- We updated the draggable work orders to highlight Technicians and Resource that match Work Order requirements and matched the look and size of the time slots in the Gantt Chart, giving Dispatchers instant visual feedback

OUR SOLUTION

FIELD SERVICE SCHEDULER

THANK YOU