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Elevator Pitch

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## Problem

Anyone who has worked in the retail or restaurant industry, or any similar job, would probably agree that the scheduling process is less than optimal. Usually, the schedule is made by one manager who will usually just print that schedule out and post it somewhere for employees to see, whether that be in the business or in a group chat, every week or two. While that may seem like a reasonable way to get things done, but there are many inefficiencies in this system.

The primary problem with this type of solution has primarily to do with memory. It is up to this one manager to remember the available work hours of ten, twenty, thirty or more employees all on their own. This would be hard for one person on their own to remember, and that's before taking vacation and other requests for days off from all their employees into account. Such a system makes it incredibly easy for the person making the schedule to accidentally schedule someone to work a shift that they cannot work, potentially for multiple shifts throughout the week. This would lead to either the manager or the employee scrambling to find someone to cover those shifts.

Relating to getting shifts covered, it is not uncommon for employees to realize they need a day off after the schedule is already made. In this case, the employee must go around asking all their coworkers to cover that shift for them. While they can often ask coworkers while working a shift before the one they need off, it is not out of the realm of possibilities that no one there can cover it causing the employee to have to figure out a way to get into contact with a coworker that they will not see before then to ask them. And after that, it is typical for a manager to need approve someone taking a shift (so they know how is expected to come into work), so that employee would have to also get ahold of the manager and hope they remember the shift change, otherwise they may get in trouble for not showing up to their shift.

It should also be mentioned that this system does not make it easy to ensure that each employee is getting a fair balance of who must work less popular shifts, such as weekends and holidays, as it can be difficult for the manager making the schedule to recall who has worked what shifts of the past weeks or months. The same can also be said for balancing shifts many people want to work such as those in a restaurant that are usually busier than others, as there is a greater chance of earning more money during those shifts.

## Proposed Solution

To combat the short comings of the traditional way of schedule creation, I would like to create a web service that helps make and maintain a work schedule for a small business. This would be most likely be a webapp, created with both desktop and mobile in mind. Perhaps mobile apps for iOS and Android could be created as well, but that would depend on the time and skill set of the assembled team. Regardless of how users access it, this service would immensely streamline the workplace schedule making process.

## Audience

While there are many businesses out there that could use a cloud-based scheduling solution, it feels best to target small businesses between twenty and one hundred people in size. Primarily ones in the services and retail industries. It seems as though businesses such as these are the ones that are most likely to need this type of solution, as usually need a full staff on a given day to ensure that all things work smoothly and to keep their customers happy, leading to a clear and easy to use scheduling solution to be crucial for business.

## Value Proposition

For starters, it would allow the employees of the company to enter and change their own work availability for any given day of the week. There could also be mechanism in place to allow employees to enter one time vacation requests to submit to management without needing to change their usual work schedule. Any regular schedule or vacation would then be submitted to management for approval. In the case the request is approved, management will be warned that the specific employee is unavailable if they attempt to schedule on a day they are unable to work. If denied, the employee will be notified so they may adjust accordingly. This should create much less stress on both the staff and management, as the chances of someone being scheduled for a shift they cannot work will be much lower.

As for the case in which an employee needs a shift covered at the last minute, there would be message board system that would allow them to send everyone with the same role at the business a request to cover or trade shifts. When two employees are switching shifts, the system would notify and ask for approval from manager. Once approved, they schedule for will automatically be updated accordingly.

Additionally, all previously made schedules will be stored, allowing for management to go back indefinitely and see who has worked what shifts. This would help them make a schedule with balance and fairness in mind.

## Competitors

Naturally, there are already several competitors in this space already. Some such competitors are Humanity, Hubstaff, ABC Roster, and Sage HR to name a few. However, each of these has some sort of downfall compared to what is being proposed. Whether that be that fact that they have extra features that may not be needed for a small business looking to just create and manage a schedule or an unfriendly user interface.

## Achievements

If this project is chosen for development, I hoped to be able to create a fully functional scheduling solution that could be feasibly used by a small business. While doing so, I hope to learn more about building full stack, cross platform, and cloud-based projects, as I have no real experience in doing so.