

BUSINESS CASE	
Proposed Project	Our goal is to design and implement a Software for Workforce Scheduling.
Date Produced	September 20, 2023
Background	<p>Background Information:</p> <p>Employers have a big responsibility to manage employees' schedules in order to fulfill all roles. Schedules constantly change, making it difficult to keep everyone updated in real-time. By using workforce scheduling software, employers no longer need to manually schedule every task and employees can manage their own schedules more efficiently.</p>

**Business Need/
Opportunity****Business Need:**

Our advanced technology eliminates outdated scheduling methods that involve pen and paper by providing scheduling software, time clocking, and communication software. This web-based solution eliminates the need for back-office paper schedules, sticky notes, and lost email threads.

Employers can update shifts and schedules from anywhere, at any time.

Our software enables employers to stay connected with their employees in a contactless manner. With its user-friendly interface, employers and employees can easily communicate and remain accountable, allowing the company to focus on achieving success. The software offers a range of features including availability management, task assignment, and time-off requests, all accessible from a computer. With our product, managers can enhance productivity and employees can feel empowered.

Market:

There are similar products being released in the market, but unfortunately, most of them are not free. Some of the most popular products in the market include Connecteam and Homebase. Connecteam is an app that is \$29/month for 30 users and Homebase is \$20/month. Our product's purpose is for educational use, and we plan on offering it to users for free. Our product will also be open source, so users can customize the product according to their requirements. We hope that this will benefit thousands of employers who can take advantage of it.

Options

Outline implementation plan:

Tasks

Week1 Brainstorming and Research

Week2 Creating business case and cost estimates

Week3 Business case finalization

Week4 Business case feedback from Stakeholder

Week5 Gathering Ideas of design constraints and requirement

Week6 Discussion of the design process

Week7 Build low fidelity prototype

Week8 Build high fidelity prototype

Week9 Edit hi-fi prototypes and scrum meeting with stakeholder

Week10 Front-end implementation(making solution 1,2,3)

Week11 Scrum meeting for reviewing front-end implementation

Week12 Start back-end implementation of solution3

Week12 Testing and debugging

Week12 Connect to the model(mongoDB)

Week13 Finalize the prototypes and deliver

Week13 Finalize the report

Cost-Benefit Analysis

COST ESTIMATES						
Project Name		WorkFlow				
HR Cost Estimates						
Activity	Duration (days)	Resource	% Allocate	Work (days)	Daily Rate	Cost
Brainstorming and research	2.0	Human Resource	1.8	6.0	\$360.00	\$2,160.00
Creating business case and cost estimate	4.0	Human Resource	3.6	12.0	\$360.00	\$4,320.00
Business case finilization	10.0	Human Resource	8.9	30.0	\$360.00	\$10,800.00
Business case feedback from skateholder	1.0	Human Resource	0.9	3.0	\$360.00	\$1,080.00
Gathering ideas of the design constraints and requirement	6.0	Human Resource	5.4	18.0	\$360.00	\$6,480.00
Discussion of the design process	7.0	Human Resource	6.3	21.0	\$360.00	\$7,560.00
Build low-fidelity prototype	15.0	Human Resource	13.4	15.0	\$120.00	\$1,800.00
Build high-fidelity prototype	4.0	Human Resource	3.6	4.0	\$120.00	\$480.00
Edit high-fidelity prototype	9.0	Human Resource	8.0	18.0	\$240.00	\$4,320.00
Front-end implementation	5.0	Human Resource	4.5	15.0	\$360.00	\$5,400.00
Reviewing front-end implementation	2.0	Human Resource	1.8	6.0	\$240.00	\$1,440.00
Start back-end implementation	14.0	Human Resource	12.5	28.0	\$240.00	\$6,720.00
Testing and debugging	14.0	Human Resource	12.5	28.0	\$240.00	\$6,720.00
Connect to the model	4.0	Human Resource	3.6	8.0	\$240.00	\$1,920.00
Deliver the MVC prototype	1.0	Human Resource	0.9	3.0	\$360.00	\$1,080.00
Finalize the report	14.0	Human Resource	12.5	42.0	\$360.00	\$15,120.00
Total HR Cost Estimates						\$77,400.00
Other Cost Estimates						
Item	Quantity	Description			Unit Cost	Cost
Copyright fee of images	1.0	Paymennt			\$50.00	\$50.00
Total Other Cost Estimates						\$50.00
Total Project Cost Estimates						\$77,450.00
Total Duration(in days)		112.0				

Recommendation

There are three different ways users may be managing their schedules currently:

1. Users are not using any managing software
2. Users are already using a paid software
3. Users are using a hard copy based schedule planner

In each of these circumstances, the user will need to take time to learn how our software works and migrate their information from another software or paper to our product. These interruptions may cause users to not want to change their current schedule management technique. However, the benefits of our software outweigh these interruptions and the interruptions are only temporary, while the benefits are permanent.