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Shift Creator
Team Project – D.1 Inception
CS 386 – Software Engineering
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Prof. Dr. Marco Gerosa

Introduction:

The goal of our product is to create a program that helps manage employees schedule based on availabilities, time off and any changes in shifts. Our work schedule maker should be easy to use allowing anyone to quickly create a schedule that works for every employee. Many employers run into a tedious task of painfully trying to figure out a schedule that works for everyone and the business. Our work schedule maker will consist of a simple interface that will do all the hard work for you, creating a perfect schedule that works for everyone.

Initial Value Proposition:

Our product is the easiest to use scheduling software that allows managers to automatically generate schedules customized to their business while avoiding common employee scheduling complaints.

Initial Consumer Segments:

Business owners and department managers

Interviews Summary:

Who: John Rooker interviewed by Nick Anderson

When: 2/7/2018

Consumer segment: Department Manager

Key insights: More varied shift options than previously thought: 4x10hrs or 3x12hrs. Some shifts require special certifications. States have different laws regarding number of consecutive days or overtime.

We thought: Business would have unique requirements for different areas of industry.

We learnt: Scheduling requirements are even more complex than we previously thought including state law requirements. Shift length can be varied among employees within each day. Number of employees can be much larger, possibly over a hundred, than previously thought for larger departments.

Representative quotes:

"I had to take care of scheduling 100-120 people max."

Current software "is really good if can standardize your schedules."

"We had a minimum number of people we had to have on a shift."

Hypotheses validated: Scheduling is a time consuming task. Businesses can have varied or unique shift requirements. Employees need specific hour amounts per week.

Assessment: Must have the ability to scale up to large groups for larger businesses. Ability to comply with federal laws is a must have. On-call shift assignments could be nice to have. Max number of scheduled hours must be per employee.

Who: Brian Wade interviewed by Nick Anderson

When: 2/7/2018

Consumer segment: Lead Medical Technician

Key insights: Current scheduling software is not user friendly. Employees like set schedules to allow for future planning. Desire to add shift assignments or tasks alongside schedule.

We thought: Most employees would be able to work most shifts. All that's needed on the schedule are times.

We learnt: Color coding would be very helpful is allowing the schedule to be understood quickly. There are more special cases than previously considered: leads, project days, and required certifications. Scheduling is not always performed by managers.

Representative quotes:

Current software "is not all that user friendly."

"If I could color my schedule that would solve half my problems."

"Only way to establish a pattern is if nobody asks for days off."

Hypotheses validated: Current software is hard use. Scheduling is a time consuming task. **Assessment**: Must have ability to block off vacation days. Software ease of use is critical. Must show shift times. Color coding would be a nice to have. An automatically generated suggested schedule with ability to tweak would be nice to have.

Who: Nathan Triepke interviewed by Ryan Wallace

When: 2/7/2018

Consumer segment: Store manager for Home Depot

Key insights:

Writes out everyone's schedule by hand. This task takes him about 2 hours every Monday writing the schedule for the next two weeks. He manages over 30 employees.

We thought: Our audience should probably be orientated around people who are fairly familiar with computers.

We learnt: Some people are not computer savvy. In this case Nathan only used a computer to check his E-Mail.

Representative quotes:

"It's going to take me a lot of time to learn how to use the computer"

Hypotheses validated: Hard to teach an old dog new tricks. Some users are not computer friendly.

Assessment: Nathan was an old fashion man who preferred to work out employee schedules with pen and paper. He has been managing employees for 17 years and only uses his computer to check email. Nathan might not be our target audience for our product and we should look for people who are more tech savvy.

Who: Ky Simonian interviewed by Ryan Wallace

When: 2/8/2018

Consumer segment: Manager at Cline Library

Key insights: Currently making employee schedules with Excel. It is important that a schedule can be printed. Uses a database to view any schedule from any date. Makes the schedule for the whole school semester.

We thought: Most employees would be able to work most shifts. All that's needed on the schedule are times.

We learnt: Being able to print out a weekly or bi-weekly schedule is important and reviewing an older schedule for reference.

Representative quotes:

"All the products that I've looked at are not in our price range"

"It is important that our schedule can be saved and looked at in the future. So, lets say I need to look up a schedule from May of 2016 I can do that."

Hypotheses validated: It is important to save schedules and print them. These features are a must have as an employer.

Who: Tameria Hammond by Brandon Thomas

When: 2/9/2018

Consumer segment: Supervisor of Green Scheen and Essential Blend

Key insights: Been doing schedule for about two years and currently doing schedule by hand before putting it on computer using excel then uses submits to her boss which then inputs it into a program call Cronos.

We thought: Other program out there that might be doing the same thing we were thinking. **We learnt**: More research might be needed in to other programs that do scheduling to see if there is a market out there.

Representative quotes:

"It is difficult schedule here only because most employee are students and after a shift change the process for the schedule to update takes a long time"

Hypotheses validated: Getting an insight on a major company that uses another system and learning a little of how they do their system so validating our hypothesis, not entirely.

Who: Bernita Jasso by Brandon Thomas

When: 2/8/2018

Consumer segment: Shift Lead

Key insights: Used to do schedule at past jobs, currently just help with scheduling with any

clarification with the supervisor.

We thought: She doing scheduling and assuming she was tech perceptive.

We learnt: Being in charge of scheduling could lead to a lot conflict amongst employee.

Representative quotes:

"I don't do schedule, Teri does the schedule, I just help"

Hypotheses validated: Did not really get much insight from her, validating the hypotheses will have to come from other people.

Who: Victoria Ashe by Carli Martinez

When: 2/9/2018

Consumer segment: Manager

Key insights: Feels that scheduling employees is time consuming

We thought: Employees should be able to exchange shifts

We learnt: Employees want to know more in advance what their schedule is and be able to

request days off

Representative quotes:

"I want a web-based software and be able to use it on any device from any location"

Hypotheses validated: Scheduling employees is time consuming

Medium Preference: Web. Thoughts about an Excel plug in - "Nobody uses excel plug ins anymore. The script to write one is difficult to write in and only works with one version of excel so you have to make new scripts to work for all the versions."

Who: Richard Petko When: 2/9/2018

Consumer segment: Manager

Key insights: Previous experiences with similar applications were difficult to get everyone to

use, could not find any easy tools to do it

We thought: Employees must be able to make shift swaps on the application

We learnt: Cloud-based, web software will be best to be able to use anywhere from any device

Representative quotes:

"The ability to exchange shifts is crucial"

Hypotheses validated: Wants to be able to use the software anywhere with any device

Medium Preference: Web with cloud

Final Value Proposition:

Shift Creator is the easiest to use scheduling software that allows managers to automatically generate schedules customized to their business while avoiding common employee scheduling complaints.

Final Consumer Segments:

Business owners and department managers

Group participation:

Nicholas Anderson - Conducted 2 interviews, facilitated weekly meeting, wrote initial value proposition and several interview questions. - 25%

Carli Martinez - 25% Conducted 2 interviews, facilitated weekly meeting on 2/6, wrote a few interview questions, set up GitHub

Brandon Thomas - Conducted 2 interviews, took minutes at meeting and helped with interview questions.- 25%

Ryan Wallace - Conducted 2 interviews, wrote D.1 introduction, created a weekly report. - 25%