

## Project title: TurboTax for Nurse Schedulers – Gamification of our Snoozer Onboarding Process (v2)

Nothing is certain but death and taxes goes the saying...we cannot avoid the inevitable, but can we make it fun?

**Project pitch:** TurboTax makes filing taxes (almost) fun, helping to get users started in a registration process that doesn't feel at all like a registration process. Instead, you feel like you are already working on your taxes! We want nurse schedulers using Medecipher to have a similar experience, feeling like every question we ask is relevant, and they are in the driver seat "choosing their own adventure" for onboarding.

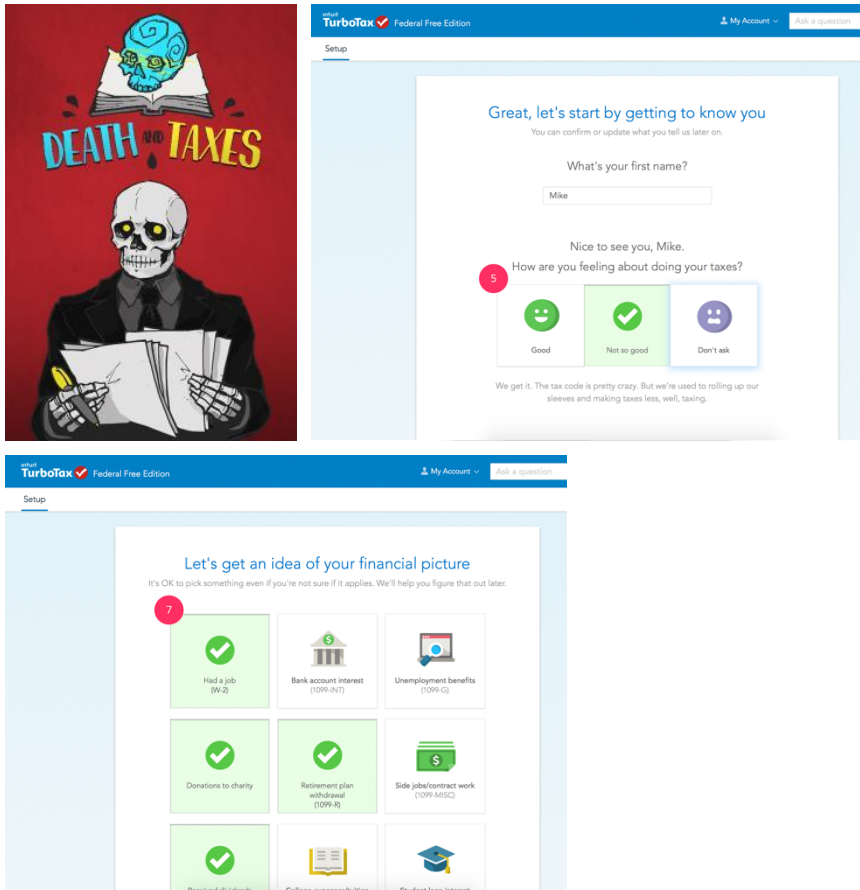


Figure 1 source - <https://www.invisionapp.com/inside-design/ux-review-turbo-tax-makes-filing-almost-fun/>

**Your task:** Medecipher has designed a snoozer onboarding questionnaire (Appendix A), and we need your help to make this better! You will redesign and implement an interactive onboarding questionnaire in React, and work with our DevOps team (including a Mines '21 graduate!) to upload the responses to our SQL database via an API. This is a v2 for this project, continuing from summer '22. This project phase will improve upon v1 using data collected from real customer interviews during product demo sessions and A/B testing.

### Your will learn:

- Figma
- React or AngularJS
- Connecting to APIs
- Data structures (SQL databases)

### You must have:

- Creativity and a good sense of humor!
- Basic understanding data structures and data hierarchy

**Our problem:**

Nurse staffing is #1 issue facing healthcare leaders today, and our solution addresses the challenges of nursing shortages by introducing sophisticated operations research methods that sequence shifts to align personnel with patient demand, while prioritizing preferences, avoiding unpredictable schedules, and increasing satisfaction.

**What we do:**

The Medecipher team comprises front-line nurses, visionary nurse informaticists, industry leading data scientists, and highly skilled engineers and developers. We understand the complexity of scheduling and the important role nurse managers hold in creating and maintaining department schedules. Our solution provides decision support tools to help nurse managers simplify that complicated process while incorporating their invaluable clinical expertise and departmental knowledge.

# Appendix A - Boring Administrative Registration Process

## 1 - Onboarding Facility Settings

**Choose your facility settings**

1. What calendar day is considered the beginning of the work week?  
 Sunday  Monday

2. Which calendar days are considered weekend shifts for night shift employees?  
 Friday  Saturday  Sunday

3. What is the maximum time that an employee can be scheduled for a continuous shift?

4. What is the minimum amount of time that must exist between the end of a standard shift and the beginning of the next standard shift?

5. What is the maximum number of consecutive days that an employee can be scheduled to work? (Minimum: 2 Days)

6. What is the full name of your department?

7. Does your department have a community and/or alternative or short name associated?

8. What type of department?  
 Emergency  Intensive Care  Medical/Surgical  
 Labor & Delivery  Perinatal

9. Does night/night shift work exist?  
 Yes  No

10. How many licensed beds are in night?

11. How many weeks is your typical Scheduling Period that you post for staff?

12. What is the maximum number of staff that can be approved for PTO on a single shift?

## 2 - Scheduling Preferences

**Choose your scheduling preferences**

1. Does a Request Period follow the calendar scheduling pattern as the other departments in the facility?  
 Yes  No  I Don't Know

2. How long is the typical Scheduling Period in department?  
 4 Weeks  6 Weeks  8 Weeks

3. How far in advance does the Request Period open for staff to register to enter requests?  
 4 Weeks  6 Weeks  8 Weeks

4. How long is the request period for night shift?  
 4 Weeks  6 Weeks  8 Weeks

5. What is the minimum amount of time that must exist between the end of one shift and the beginning of the next shift?  
 4 Hours  6 Hours  8 Hours

6. In the Request Period, what is the minimum number of consecutive shifts that night shift can request?  
 1 Shift  2 Shifts  3 Shifts  4 Shifts

7. When is the future schedule published to night shift?  
 3 weeks before first day of future schedule  
 2 weeks before first day of future schedule  
 4 weeks before first day of future schedule

8. Does the schedule in active, what is the maximum consecutive days that a staff can work?  
 Emergency  Intensive Care  Medical/Surgical  
 Labor & Delivery  Perinatal

9. What is the date when your next future schedule that will be open for scheduling requests?

10. What is the start date of the next future schedule?

## 3 - Registered Nurse Preferences

**Choose your registered nurse settings**

1. How many beds are currently on the night department request?

2. What are the schedule shift lengths for day in night?  
 4 Hours  6 Hours  8 Hours

3. What is the target staffing number for day shift beds in night?

4. What is the maximum day shift staff for night in night?

5. Are there any alternate Day Shift start times for day in night?  
 Yes  No  I Don't Know

6. Select all additional schedulable start times for Day Shifts in night:  
Day Starting  
 0800  0830  0845  0900  0930  0945  1000  
Night  
 0800  0830  0845  0900  0930  0945  1000  
Average

7. What is the target staffing number for night shift beds in night?

8. What are alternate night shift start times for night in night?  
Day Starting  
 0800  0830  0845  0900  0930  0945  1000  
Night  
 0800  0830  0845  0900  0930  0945  1000  
Average

9. Select all additional schedulable start times for Night Shifts in night:  
Day Starting  
 0800  0830  0845  0900  0930  0945  1000  
Night  
 0800  0830  0845  0900  0930  0945  1000  
Average

## 5 - PTO & Holidays

**Choose your PTO & Holidays**

1. Who can approve PTO Time Off or Leave of Absence requests for night staff?  
 Scheduler  Work Manager  Manager  Director

2. What is the maximum amount of PTO Time Off that night staff can make in a single request?  
 1 Week  2 Weeks  3 Weeks  4 Weeks

3. Can night staff make their Time Off requests before the Request Period that includes their date?  
 Yes  No

4. How far in advance can night staff make their Time Off requests?  
 2 Months  4 Weeks  6 Weeks  12 Months

5. Do you have a limit for how many night staff members can use Paid Time Off on a single shift or day?  
 Yes  No

6. Is the limit related to the shift or the day?  
 Shift  Day

7. How many night staff use Paid Time Off on a single shift or day?

8. Please select the observed holidays for day shift staff:  
 New Year's Day  Martin Luther King Day  President's Day  
 Independence Day  Labor Day  Thanksgiving Day  Christmas Day  
 Christmas Day  New Year's Day  New Year's Day

9. Does the night department maintain a staff rotation for working on major holidays?  
 Yes  No

10. What is the start date of the next future holiday?