**IAT 814 – Project**

Phase 1: Define goals

Designing a Visualisation Dashboard for reducing the Hospital Bed Turnaround time

* Who are the users / audience?
* What are the metrics needed?

Phase 2: Understand data

* Identify application data sources
* Identify data transformations needed
* Take samples to work with

Phase 3: Pilot

* Create sample Visualisation / dashboard
* Review & feedback
* Pilot Viz to sample users

Phase 4: Optimise for production

* Production implementation
* Deployment

Project: Bed Turnaround Time Mobile App Interface

User Story:

As a bed cleaner, I want to know where and when beds in my hospital need to be cleaned so I can most efficiently navigate my work route Hospital beds left unoccupied as a result of waiting for cleaners and porters is a significant cost to Fraser Health. To minimize the turnaround time, or time between one patient leaving the bed and the next patient occupying the bed, Fraser Health's System Optimization department has proposed a concept of a mobile application that communicates to the network of hospital cleaners and porters which beds need to be serviced next.

Develop a mobile app design that contains the following views:

· Landing page

• Cleaner's view: ability to see queue of beds to clean, closest beds, navigation instructions to bed, and to accept or reject jobs

• Porter's view: ability to see queue of patient movements, closest patients, navigation instructions, and to accept or reject jobs

· Profile page that summarizes number of beds that the current user cleaned/patients moved today vs. historical data and vs. other cleaners/porters

Include examples of the following user cases:

· Cleaner/porter receiving notification

• Cleaner/porter accepting job

• Navigation from current location to job location

· App on a typical smartphone screen and a tablet screen

Present the project, research, methodology, results, and conclusions behind the design to System Optimization at the end of the term.

Dashboard Sample Design : <https://infosolblog.com/infosol-dashboard-awards-wow-superheroes-at-ibis-2017/>

**Ways to reduce patient turnaround time and improve service quality in emergency departments**

<https://www.researchgate.net/profile/Yariv_Marmor/publication/7641746_Ways_to_reduce_patient_turnaround_time_and_improve_service_quality_in_emergency_departments/links/0fcfd508e9fd49c1b5000000.pdf>

Hospital Floor Plans

<https://www.edrawsoft.com/hospital-floor-plan-example.html>

