

CS4178 : Software Requirements and Modelling

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To-Do for this Week's Lab



List

- ❑ Brush Up
 - ❑ This Week PDF Topics : Qualities, Constraints, Rationale and Assumption
 - ❑ Checkout Recorded Lectures on the above topics
- ❑ Go in Detail :
 - ❑ Rationalizing Set of Requirements (How is it done)
- ❑ Lab Week06 – To be graded
- ❑ Submission Criteria

Tip



Practice Before Attempting Rationalising a Set of Requirements

Requirements (Not-yet-justified Features)

- The device shall be portable.
- The device shall provide GPS location accurate to 100m.
- The device shall provide a compass accurate to 0.5 degrees.
- The device shall be water-resistant.
- The device shall receive FM radio.
- The device shall provide light sufficient to read by for 5+ min.



Inferred Assumptions

- Many people enjoy outdoor leisure activities.
- There is a market for multi-functional devices for outdoor leisure use.

Inferred Goals

- The company wants to sell multi-functional devices for outdoor leisure use.
- The device will be:
 - carried on the person.
 - hand-held.
 - relied on in emergency for a range of functions.
- The device may be used:
 - in all weathers.
 - high in the mountains.
 - in a canoe or small boat.
 - for some days away from mains electrical power.



Possible New Requirements

- The device shall weigh no more than (TBD 800g) grams.
- The device shall be operable between (TBD -50) and (TBD +60) °C
- The device shall be waterproof to (TBD 3) atmospheres pressure.
- The device shall survive a drop of (TBD 1m) onto a hard surface.
- The device shall be rechargeable in the field in (TBD 30min).
- The device shall have an MTBF of (TBD 10,000h).

TBD = To be decided.

Case Study



You work for a Medical Device Company

- Your employer won a bid to supply Irish police and public hospitals with a medical device
- The device is supposed to be capable of performing a variety of functions during emergencies

Case Study



You work for a Medical Device Company

- Your employer won a bid to supply Irish police and public hospitals with a medical device
- The device is supposed to be capable of performing a variety of functions during emergencies
- Provided only the above information is given, use your creativity and draft out the*:
 1. Initial Requirements
 2. Inferred Assumptions
 3. Inferred Goals
 4. Possible New Requirements

* For each section focus on all aspects - what's common, what's specific to the hospital and what's specific to the police

Week 06 – Submission Details (Assignment 2)



Due Dates and Submission Criteria

- ❑ Sulis Submission before Next Thursday 20th October 2022 18:00
- ❑ Extended Due Date (With Penalty each day) : Sunday 23th October 2022 19:00
- ❑ Combine all parts of your solution set into a single PDF and submit through the directory Sulis > Assignments
- ❑ NOTE: do not follow the graphical format with the orange boxes; only submit a well-structured pdf file
- ❑ Please adhere to the following nomenclature of your submission:
 - ❑ CS4178_GROUPXX_ASSIGNMENT02.pdf
 - ❑ Here XX represents your group number (For this please check Sulis) – *Please get back to me ASAP if your group members are not responding/ not active/ if there is any change needed in the group;=*
 - ❑ All teammates in a group must make the same submission on Sulis (in order to be graded)

Thank You