

Assignment 2

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Tester (Zicheng Wan)

Scenario Refinement for Scenario7		
Scenario(s):		There are many other features except the pulse function in a pacemaker, such as communication module and alarm module, we need to test and calculate the power consumption of each module.
Business Goals:		Find a most energy efficient mode suit for pacemaker
Relevant Quality Attributes:		Energy efficiency
S c e n a r i o C o m p o n e n t s	Stimulus:	There are many features consuming power.
	Stimulus Source:	Both pacemaker company and users want the pacemaker to have more functions.
	Environment:	The pacemaker can not be charged unless we take it out
	Artifact (If Known):	
	Response:	We could constrain the running time for communication module, for example, set a window time in a day for user or doctor to download the record.
	Response Measure:	What if doctor need to read record under some emergency situation.
Questions:		What is the balance between power consumption and functionality?
Issues:		Pursuing the energy efficiency may cause some issues on both reliability and security.

Scenario Refinement for Scenario 8	
Scenario(s):	Hackers want to read the pacemaker information without permission.
Business Goals:	Prevent attack from hackers
Relevant Quality Attributes:	Security

S c e n a r i o C o m p o n e n t s	Stimulus:	Hackers trying to attack the pacemaker and the pacemaker do not have enough resources to prevent the attack.
	Stimulus Source:	Hacker
	Environment:	The doctor and users could communicate with pacemaker with a software or an app.
	Artifact (If Known):	Authorization server
	Response:	We could make sure the security of the client end
	Response Measure:	We need to run a authorization server
Questions:		What if the pacemaker itself got cracked?
Issues:		We may need to update the pacemaker version frequently