



Csci 150 Intro to Software Engineering
Quiz 5 (Nov 6, 2018)

Name: _____

1. Today is election day, introduce a functional requirement for an image processing software to scan the result of a paper-based ballot using the following table. *The more information the higher score. If you don't feel any information can be input in the table, put "NA".*
2. Introduce one closed-interview question to elicit more details about the requirement of Q1.

For Q1, assume that the ballot looks like this:

Governor

Omar Flores	Preferred Party	Students First	
Alex Liu	Preferred Party	Viva Faculty	

[Simple Description for Q1] The software should identify who is elected by identifying which oval is marked and send it as output. If both ovals are marked, this ballot is considered an invalid vote. If none of the oval is marked. No one's votes should be incremented. Note: We don't consider accuracy of the software here.

Please note this is just an example answer. There could be other answer.

Function	Ballot Result Identification
Description	Scan the ballot and identify which oval(s) is/are marked. Send the output to vote accumulating component
Inputs	Voter elects/draw either 0, 1, or 2 ovals.
Source	A scantron shown as on the top
Outputs	Either Alex, Omar, or none is counted.
Destination	Results sent to next subsystem (for example, the one that accumulates the votes).
Action	If (none oval drawn two oval drawn) return 0 If (only Alex oval drawn) return Alex + 1 If (only Omar oval drawn) return Omar + 1
Requirements	Image processing software needs to recognize ovals if voter draw them.
Precondition	Scantron is blank initially.
Side Effects	NA

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