CSE 435 - Initial Research and Questions - Team 6
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Questions:

1. What cars does this need to support, per plant?
2. What are the possible defect types per inspection area and their associated marking colors?
3. What are the possible severity levels of defects and how are they decided?
4. The E-Coat Audits give a number of units but only display one vehicle diagram. Is the audit a total of all the units? How does an analyst decide which units to include?
5. Can you walk me through how the analyst currently finds and documents defects?
6. Does the analyst ever examine multiple cars at once?
7. Can we receive a copy of the document the analyst uses to record defects on an individual car?
8. What are the constraints regarding development of the system? (Must be web-app, or iOS app, or Windows application)
9. What device will the analyst be using? What sort of connectivity will the device have?
10. Do we have to account for customer satisfaction?
11. Does the area of a dot correspond to the severity of the paint defect? What does the size of markings indicate?
12. What is the meaning of 'VSI' as seen on the E-Coat, Prime and Polish reports?
13. What would be a good way for the analyst to mark errors on vehicle diagrams? Should it feel similar to colored pencil and paper or is a more preferred interface feel?
14. Does the system need to account for mistakes made during data entry?
15. Will the data provided for each report always be consistent, with little to no information missing in different cases?
16. For development, do we need to follow a certain process model?
17. What kind of reports need to be generated and how should they be formatted? Should they mimic those provided to us? If any, what additional analysis and diagrams do they need to have?
18. What is the painting process of a vehicle? Specifically, what is an E-Coat?
19. What are possible shifts and their corresponding times?
20. What are the different check-points?
21. Do we need to worry about costs associated with defects?

Potential Risks:

1. We could implement a system that would not be usable by the analyst in their work environment.
2. We could implement a system that cannot be used efficiently in the work environment.
3. It may be difficult to translate/input severity and type of defect in an intuitive way. I think a large portion of development time will be devoted to the UI/ease of use.
4. It could potentially be difficult to automate the analysis of a mark on a diagram, and then collate this into one report. There is potential that severity of flaws may be input wrong, or if the analysis is wrong, we could be inaccurately reporting the flaws, which would be a horrible risk.
5. A risk for this project would be the very likely expansion of complexity that can occur for dealing with something as diverse as a vehicle. If multiple vehicle models are taken into account on one report, will the system still work correctly? Or will a report be generated correctly whether the report is from vehicle model A versus vehicle model B? Complexity will create higher risk in and of itself.
6. One risk is not being able to cover the costs caused by these defects.