

Problem Statement and Goals

Software Engineering

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Table 1: Revision History

Date	Developer(s)	Change
September 20, 2022	Joy Xiao	Problem statement and stakeholders
September 23, 2022	Leon So	Update problem
September 23, 2022	Joy Xiao	Add stretch goals and update stakeholders
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1 Problem Statement

[You should check your problem statement with the problem statement checklist. —SS] [You can change the section headings, as long as you include the required information. —SS]

1.1 Problem

Independent auto repair shops do not have an efficient way of reaching and interacting with new customers. Currently, many independent shop owners rely on word-of-mouth referrals as a main channel to acquiring new customers. Independent auto repair shops are also spending a significant amount of their time on administrative work such as managing appointments and providing quotes. As a result, independent auto repair shops have a difficult time competing with larger repair shops which have dedicated systems and services in place.

On the other hand, customers do not have an effective way to find and compare auto repair shops. Currently, one of the only ways to compare repair

shops is by manually searching or reaching out to repair shops one-by-one. This process can often be repetitive and time-consuming.

1.2 Inputs and Outputs

[Characterize the problem in terms of “high level” inputs and outputs. Use abstraction so that you can avoid details. —SS]

1.3 Stakeholders

- Vehicle owners
- Auto repair shop owner
- Auto repair shop employees
- Sayyara (the company)
- Nabeel Ibrahim (project supervisor)
- Tiny Coders (developers of the project)

1.4 Environment

[Hardware and software —SS]

2 Goals

3 Stretch Goals

- Deploy application and server to the cloud.
- Have a notification system to notify when a quote has been requested, when appointments are created or updated, and when a service job is completed/assigned to a technician.
- Include a reviews component to create reviews and view auto shop reviews. This way customers can see past reviews before determining if they want to book an appointment with a specific shop.