

SIP311  
SPRING SEMESTER  
2020

SIP  
Pitch

**HVAC Installation Proposal**

Student Name: Jacob Dominski

Advancing Computer Science

PROJECT PROPOSAL

**PROJECT TITLE**

HVAC Installation Proposal Mobile Application

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**PROJECT DESCRIPTION**

This project aims to create a faster and more efficient workflow within my client’s company. My app is meant for the HVAC industry where is big portion of that industry still use pen and paper.

Currently, there process is to go and check the unit. Then, return back to management where they create a proposal on the computer. This can take up to one day and they might lose the customer during that time.

My idea would let the technician create the proposal while on the job to decreasing the time taken to get the customer to agree to the proposal. This would increase workflow and efficiency by approximately 25% – 30%.

The app works by letting the technician create a form where they select the options the customer needs for an AC unit installation. Then, it will generate a form where both the customer and the technician will sign the document and an email will be sent to both the company and the customer so work can begin.

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**INNOVATION CLAIM**

This project is innovative because it will change the way my clients do business and engage with their customers in a new and technological way.

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**USAGE SCENARIO**

This application would be deployed and utilized by all company representatives in the field. This app would be utilized by the technician after he has analyzed the customer’s unit and decided a new AC unit would be needed. When this scenario arises, the technician would use the app to generate a proposal for the customer. The technician would enter the customer’s information like name and email address and all the equipment along with other materials needed for the job. Then the app would ask for both the technician’s signature (representing the company) and the customer signature for legal purposes. Finally, the app will automatically generate a PDF file and let the technician preview it to make sure all the information is correct. Once everything seems correct, the technician will click the complete button and the file will be sent both to the manager and the customer. This whole process would take less than five minutes whereas before it had the possibility of taking one day.

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**STUDENT ROLE**

UX/UI designer: Jacob Dominski

Software Developer: Jacob Dominski

Quality Assurance: Jacob Dominski

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**EVALUATION CRITERIA**

1. Does the app include an interactive experience and have all of the necessary options available for the user to select?
2. Do all aspects of the application perform to a superior standard?
3. Are the UX and UI designs enjoyable, simple, and easy to use for the user?
4. Is the content in the application void of any grammatical, typographical, or syntax errors while displaying accurate information?
5. Does the final proposal document meet the standards of the client and portray accurate information for both the company and the customer?

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**INTENDED METHODOLOGY, DATA & MATERIAL**

I intend to follow the agile development process for my application. Specifically, I plan to follow the process of Scrum where I first create a working prototype of the software; then wait for feedback.

My intended data is customer information, AC equipment, supplies that accompany the AC equipment, warranty information, brand name of the AC unit, price, Register of Contractors required wording, and company information.

My intended materials for creating the application is the flutter framework for developing mobile applications, the dart programming language, and various emulators for testing my software.

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**PROJECT OBJECTIVES**

[Insert outline of objectives and tasks pertaining to your SIP.]

* Make the app interactive and having all of the necessary options available.
* Test all aspects of the application to ensure proper functionality
* Create an enjoyable UX and UI design that is simple and easy for the user to use.
* Review for typographical errors and ensure accurate information within the application.
* Ensure the accuracy of the final PDF document when emailed to the customer.

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**EXPECTED OUTCOMES**

[Insert paragraphs of expected outcomes.]

The expected outcome is to have the application generate a signed proposal with the proper information of what the customer needs. This will take place while on-site with the customer. An email of the proposal will be sent to both parties, thus decreasing the lag in time between initial meeting and the generation of the proposal. The finished app will increase the workflow/efficiency of the company by 25-30% and bring more customer sales.

**PRIOR ART**

Go Canvas:

[https://www.gocanvas.com/mobile-forms-apps/137-Heating-Ventilation-Air-Conditioning-HVAC-/show\_category (Links to an external site.)](https://www.gocanvas.com/mobile-forms-apps/137-Heating-Ventilation-Air-Conditioning-HVAC-/show_category)

Utility Mobile Apps:

[https://www.utilitymobileapps.com/hvac-estimates-app/ (Links to an external site.)](https://www.utilitymobileapps.com/hvac-estimates-app/)

Proposal Builder:

[https://download.cnet.com/HVAC-Proposal-Builder-Pro/3000-2124\_4-76366991.html (Links to an external site.)](https://download.cnet.com/HVAC-Proposal-Builder-Pro/3000-2124_4-76366991.html)