Statement of Work

For: The University of Texas at Dallas

Project: Campus Parking Availability App

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SE 4381.002 - Spring 2020

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**Purpose of Document**

The purpose of this document is to present the Statement of Work (SOW) which outlines KLY Inc.’s roles, tasks, dependencies, and deliverables at a high level for The University of Texas at Dallas (UTD). UTD will enable KLY Inc. to implement an innovative parking application to serve in aiding the students of UTD with obtaining information on the campus’ parking lots and structures.

KLY Inc. is not obligated to provide services described in this SOW unless an order for the service, incorporating the terms of an agreed SOW, has been placed by the customer under a signed governing agreement in place between UTD and KLY Inc. and accepted by KLY Inc. The performance of the services described herewith are subject to the assumptions, exclusions, and other conditions identified in this document. In the event of a conflict between the terms of the agreement and this SOW, the terms of this SOW shall prevail with respect to the subject matter contained herein.

**I. Scope of Work**

KLY Inc. will work with The University of Texas at Dallas to create a mobile application for students and faculty to see parking lot availability around UTD. The application will include the below functionality:

* Login page requiring UTD credentials
* Campus map showing availability of parking spaces
* Search filter by location, availability, and space color
* Suggestions for the best time for parking availability
* Logout page

**II. Scope of Project**

This project contains two parts. First, the initial set-up of the host computer system and the antenna/sensors. These two components will be responsible for collecting, storing, and communicating information about the availability of parking spaces at a particular parking lot. Some responsibilities include:

* Keeping track of how many cars enter a given parking lot
* Identifying which colored parking sticker each car has
* Keeping track of how many cars leave a given parking lot
* Sending parking lot capacity information to the host computer system

Next, the development and management of the application. The application is what the end users will use to track open parking lot spaces around UTD. Functionalities for the app include:

* Receiving parking lot availability information form host computer system
* Displaying to the user all parking lots with available spaces on campus
* Displaying the availability of the colored parking spots in a given parking lot

**III. Components**

The components of this project shall include the following:

1. Host Computer System:

The host computer system is defined as the computational infrastructure necessary for the storage and processing of parking data including but not limited to: license plates and their links to students, car types, parking spot locations, and the occupation status thereof, and so forth.

1. Antennas and Sensors

The antennas and sensors are defined as the sensors and antenna necessary to detect the colored transponder tags (which match the colors of UTD parking spots) as cars drive through the gates to parking lots. These components will be used to relate information about the capacity of the parking lots to the host computer system.

1. Network infrastructure

The network infrastructure is defined as the equipment necessary to connect all the computational infrastructure, antenna, and sensors together over a secure UTD wide area network (WAN) so that the system may function as a cohesive unit.

1. Colored transponder tags

The colored transponder tags are defined as the parking stickers currently given to UTD students when they purchase a parking pass but with radio transponder components in them. These will interact with the antenna and sensors to determine whether a car is present in a parking area.

1. Mobile application

The mobile application is defined as the application by which end users will utilize in order to see the available parking lots on the UTD campus. The application shall implement all the requirements as stated by UTD.

**IV. Out of Scope**

All conceivable functionalities and capabilities of the system which are not explicitly listed in the above sections are considered to be out of scope. These functionalities can include, but are not limited to, the following:

* Determining the exact parking spot in which a user can park
* Determining whether or not a student has parked in the appropriate color of parking spot for their parking pass
* Issuing parking tickets/fees
* Interacting directly with law enforcement as an informant mechanism
* Conducting parking enforcement

**Services Rendered**The services defined in this SOW detail the essential areas where KLY Inc. is responsible for delivering project requirements. The following sections list deliverables that are the responsibility of KLY Inc. to deliver upon completion of the project.

1. **Requirement Phase:**

Objective:

* The KLY Inc. shall consult with UTD to gather and clearly define all requirements to create an initial document. This phase requires KLY Inc. to work closely with UTD in order to determine the requirements for functionality, performance, and various design choices for the system.

Key Deliverables:

* + 1. Stakeholder interview schedule
    2. Requirements document

1. **Design Phase:**

Objective:

* The KLY Inc. shall deliver finalized architecture documentation to the client which clearly defines the hardware and software aspects of the system. This will include the placement of antenna, sensors, and transponder tags as well as database schemas, back-end software technologies, application interfaces, and other essential software components needed for the system to operate. It shall address the advantages and limitations of the technologies and provide reasoning as to why such technologies were chosen.

Key Deliverables:

* + 1. Finalized software architecture documentation
    2. Design for parking system hardware layout
    3. Finalized software, hardware, and architecture choices
    4. Finalized WAN architecture documentation

1. **Development Phase:**

Objective:

* KLY Inc. shall erect the necessary hardware in the proper places as specified in the architecture documentation and develop the software necessary to interact with said hardware in a manner compliant with the architecture documentation. Additionally, KLY Inc. shall develop the necessary programs needed in order for mobile application to operate. This includes the data retrieval from various antennas and sensors, storing gathered parking lot data on the central computer system, displaying gathered data to end users, and other necessary systems required to operate the service. In the case of unforeseeable hindrances, the milestones and/or timeline of the project shall be renegotiated.

Key Deliverables:

* + 1. Functional hardware set up throughout parking areas on campus selected by client
    2. Functional code for controlling hardware and logging parking data
    3. Functional database
    4. Functional code for displaying parking lot capacities to end user

1. **Testing Phase:**

Objectives:

* KLY Inc. shall test the interactions between the hardware and software as well as test for latent defects in the software. Unit tests shall be conducted for all applicable code and integration testing shall be conducted on the entire system which constitutes the antenna and sensor hardware, databases, as well as back-end and front-end code. User acceptance testing shall also be conducted.

Key Deliverables:

* + 1. Testing Plan
    2. Testing Results
    3. Unit testing results sheet

1. **Deployment Phase:**

Objective:

* KLY Inc. shall deploy the product into its pre-production environment as a sandbox to find and fix any defects not caught in the testing phase. If no serious defects arise, the product shall be deployed into a production environment.

Key Deliverables:

* + 1. Deployed website
    2. Functional web service accessible to parking staff
    3. Functional mobile application for end users

1. **Maintenance Phase:**

Objectives:

* KLY Inc. shall deliver the final working code base in addition to all of the hardware connected so that the parking system is fully functional. The training plan shall be delivered to the client and the users of the system shall be trained accordingly. The training plan shall contain instructions on how the client shall use the system as well as contacts for product support. Backup method usage instructions shall be provided among the instructions for usage in the event of hardware or software failure.

Key Deliverables:

* + 1. Functional codebase that passed acceptance testing
    2. Functional hardware connected to codebase that passed acceptance testing
    3. Product usage instructions
    4. Support contacts
    5. Product failure recovery instructions

**Customer Responsibilities**

* UTD assigns a point of contact (POC) for the development team to coordinate their efforts with and address existing and emerging concerns.
* UTD facilitates the requirement elicitation process for development team by giving them free access to the necessary facilities and persons
* UTD surveys and determines where the required hardware should be installed.
* As UTD enforces a color-coded parking permit, the project requires UTD to do any necessary rearrangements in its open-area parking spaces.
* UTD makes its open-area parking spaces controllable based on its permit policy.
* UTD compensates the development team, as agreed, upon the delivery of the product.
* UTD pays the cost of labor, equipment, and services associated with the project.
* In case of taking any fees for the service provided by the app, UTD will integrate and normalize the app with its current parking billing system or any other databases.
* UTD facilitates and cooperates in the possible software-hardware integration pilot testing.
* UTD participates in the final integration testing.

**Customer Assumption**

* The application runs on both Android and iOS, KLY Inc. is not responsible for any possible security breaches.
* Any services provided after the delivery of the product will happen based on new agreements.
* Effective from the day of formal validation and delivery, the development team offers UTD 30 days of product support free of charge.
* UTD is responsible for the functionality of all the hardware installed and deployed.
* KLY Inc. is not responsible for the malfunctions and any other issues related to the app and the hardware it interacts with after 30 days of the delivery of the system.
* KLY Inc. reserves the right to use the source code (the generic part) developed in this project in any similar projects it may undertake in the future.
* KLY Inc. will remain active in developing similar projects with the same base source code. If during the development of other projects should any security holes or bugs arise, the team will release a security update for its app to UTD free of charge.
* If the app behaves abnormally and does not meet requirements, KLY Inc. will investigate the problem. If KLY Inc. finds out that the problem is with the app, we will fix the problem free of charge. However, if the finding proves differently, the team will ask for full compensation for its time investigating.

**Acceptance Criteria**

Acceptance of Services:

* KLY Inc. shall notify UTD upon the completion of the services by sending a notice of completion. Upon receiving this notice, the UTD will have thirty (30) days to examine the acceptability of the delivered services and their conformance to the requirements as stated in the SOW. Should the delivered products be found underperforming and/or unacceptable from what was agreed upon in the SOW, UTD shall send a notice of revision to KLY Inc.

KLY Inc. shall deem the services as accepted and finished if any of the following occurs:

1. Thirty days have passed since the notice of completion has been sent with no response of non-conformance from the University of Texas at Dallas.
2. The University of Texas at Dallas notifies the development team of their acceptance of the deliverables provided.
3. The University of Texas at Dallas utilizes any of the delivered products in any shape or form of business operations other than testing the deliverables for conformance.

**Pricing / Payment Milestones**Milestone fees shall be paid in full as the fulfillment of deliverables as listed below are accepted by UTD. Acceptance of the deliverables is described in the section “Acceptance Criteria” above.

|  |  |  |
| --- | --- | --- |
| **Milestone Name** | **Description** | **Price (USD)** |
| M-01 | Requirements Gathering | $159,055 |
| M-02 | Design | $112,131 |
| M-03 | Development | $358,765 |
| M-04 | Testing and Quality Assurance | $310,506 |
| M-05 | Deployment | $146,167 |
|  | **Total** | **$1,086,624** |

**Pricing Assumptions**

* Pricing is in U.S. dollars
* Changes to the scope of work may result in a change to the final pricing outlined in this SOW
* Once payment for a deliverable has been rendered, it is nonrefundable
* Should the client cancel the project for any reason, the amount paid for deliverables shall not be refunded

**Agreement**

This Statement of Work and the terms and conditions of the Agreement represents the agreement between KLY Inc. and UTD. The Agreement shall overrule all oral and written negotiations that may have occurred prior to the signing of the Agreement. Changes to the Statement of Work shall only be accepted in writing and after both representatives of UTD and KLY Inc. accept the conditions.

In witness whereof, the parties hereto have allowed this Statement of Work to be commenced.

|  |  |
| --- | --- |
| **University of Texas at Dallas (client)** | **KLY Inc. (supplier)** |
| Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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