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| Requirements  Specification Document  **PayPerSurvey**  Project Code:  Advisor:  Project Team:  Submission Date: |

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**Definition of Terms, Acronyms and Abbreviations**

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| **Term** | **Description** |
| PPS | PayPerSurvey |
| Subscriber | The person who use android app to respond on survey. |
| Client | The organization or researchers want to get surveys results. |
| weighted system | The authenticity questions weightage which determined the survey value. |
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# Introduction

This document provides a complete description of all the functions and specifications of PayPerSurvey and provides the scope detail and overview of everything included in the document. PayPerSurvey (PPS) system is a combination of both web and mobile application that provides online survey facility to overcome cost and time with maximum accuracy of results to the organizations and researchers around all over the world to make their decisions smart.

## Purpose

There is a large number of local business persons, researchers and organization which prefer decision making through manual ways of surveys instead of online. Manual surveys are trusted but still chances of human errors, result compilation, visualization, and more time consumption, more cost and other resources are challenges.

There are many online free and paid platforms which are available for conducting surveys but their trust and authenticity is still questionable which is not more practical to achieve the final objective of the survey. Applications like Google forms, SurveyMonkey etc. collect users responses and provide their final results report considering each response as one entity without any constraint or weightage assigning to the questions. All the targeted clients needs a system that will provide maximum accuracy of results using modern tools and techniques. For this purpose “PayPerSurvey” provides a trusted platform where clients can create their survey with weighted system and generate a final result report based on subscriber rating and response of weighted questions of that survey.

## Scope

The proposed system is a web and android based survey solution. This system includes two platforms, web-based admin panel and an android application for subscriber to conduct surveys. The web-based application is used to generate survey questionnaires, select the target audience, and visualize the reports and subscribers payments against their profile rating. Android application is for subscriber to view profile, and give feedback of assigned survey. The proposed system is based on ‘trust and reputation system’ to gather information needed to our clients to make their decisions smart. The proposed system will dynamically optimize the subscriber profile to show their trustworthiness.

PayPerSurvey System have following module.

* **Registration Module**
* **Survey Creation Module**
* **Target Audience Selection Module**
* **Survey Processing Module**
* **Survey Analysis Module**
* **Subscribers Payments Module**

**Limitations:**

## Definitions, Acronyms, and Abbreviations

## References

## Overview

This document ...

# Overall Description

Our system is a both web and android based survey platform which facilitate clients to get maximum trusted results.

1. Web application is a platform for the admin to generate new survey, channelize the survey, select target audience and show the final results and reports. For generating survey the admin can select the existing questions form the questions bank and can generate new ones.
2. On the same web panel the admin will channelize the survey to get maximum responses only from the desired set of subscribers after adding weighted question to make the survey worthy.
3. On the same web panel after generating the question paper the admin will select the target audience for that specific survey.
4. After the selection the of target market the subscribers will provide responses. The web panel will also generates reports on the bases of responses.
5. The targeted subscribers will get the notification on the new survey on their android application. The subscriber will provide the answers of the question and system will calculate his response against each question and put on the result report.
6. After providing the survey answer the subscribers will get money according to their Specific Requirements.

## Functionality

*[This section describes the functional requirements of the system for those requirements that are expressed in the natural language style. For many applications, this may constitute the bulk of the* ***SRS/DS*** *package and thought should be given to the organization of this section. This section is typically organized by feature, but alternative organization methods may also be appropriate; for example, organiza tion by user or organization by subsystem. Functional requirements may include feature sets, capabilities, and security.*

*Where application development tools, such as requirements tools, modeling tools, and the like, are employed to capture the functionality, this section of the document would refer to the availability of that data, indicating the location and name of the tool used to capture the data.]*

### <Functional Requirement One>

*[The requirement description.]*

Stakeholders

1. Admin
2. Customer
3. Subscriber

Project Modules:

1. User Profiling Module
2. Survey Creation Module
3. Survey Scope Selection Module
4. Survey Processing Module
5. Result Analysis Module
6. Honesty Badge Module
7. Survey Payments Module

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| --- | --- | --- |
| **User Profiling Module** | | |
| FR-01.01 | Customer Registration | System shall be able to provide facility to register customer. |
| FR-01.02 | Subscriber Registration | System shall be able to provide facility to register subscriber. |
| FR-01.03 | Customer Login | System shall be able to provide facility to login customer. |
| FR-01.04 | Subscriber Login | System shall be able to provide facility to login subscriber |
| FR-01.05 | View Profile | System shall allow subscriber to view profile |
| FR-01.06 | Subscriber Change Pass. | System shall allow subscriber to change his password. |
| FR-01.07 | Customer Change Pass. | System shall allow customer to change his password. |
| FR-01.09 | Honesty Badge | System shall allow subscriber to view the honesty badge. |

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| **Survey Creation Module** | | |
| FR-02.01 | View Survey List | System shall facilitate customer to view the list of surveys. |
| FR-02.02 | Search Survey | System shall facilitate customer to search a survey by title/name. |
| FR-02.03 | Edit survey | System shall facilitate customer to edit survey (only if its status: draft). |
| FR-02.04 | Delete Survey | System shall facilitate customer to delete survey (only if its status: completed or draft) |
| FR-02.05 | Create Survey | System shall facilitate customer to create survey |
| FR-02.06 | Add custom Question | System shall facilitate customer to add custom question to the survey |
| FR-02.07 | View question bank list | System shall facilitate customer to view list of question bank organized with category |
| FR-02.08 | Add question from question bank | System shall facilitate customer to add question from question bank |
| FR-02.09 | Add weighted question | System shall facilitate customer to add weighted question to the survey |
| FR-02.10 | edit question | System shall facilitate customer to edit question in the survey |
| FR-02.11 | Delete question | System shall facilitate customer to delete question |
| FR-02.12 | Save survey | System shall facilitate customer to save survey |
| FR-02.13 | Preview survey | System shall facilitate customer to Preview the survey before channelizing it |

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| **Survey Scope Selection Module** | | |
| FR-03.01 | select target audience | System shall facilitate customer to select target audience from whom to conduct survey |
| FR-03.02 | select number of subscribers | System shall facilitate customer to select the number of subscribers |
| FR-03.03 | calculate survey cost | System shall be able to calculate cost of survey on the base of number of subscribers and their honesty badge |
| FR-03.04 | Save Survey scope | System shall facilitate customer to save the survey scope |

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| **Survey Processing Module** | | |
| FR-04.01 | Receive survey notification: | System shall allow subscriber to receive the notification for new survey |
| FR-04.02 | view list of surveys | System shall allow subscriber to view the list all awarded surveys. |
| FR-04.03 | Select survey | System shall allow subscriber to select a survey for response. |
| FR-04.04 | View survey | System shall facilitate subscriber to view the list of all questions in a selected survey. |
| FR-04.05 | Submit survey | System shall allow subscriber to submit survey after completing response. |
| FR-04.06 | View FAQs | System shall facilitate subscriber to view FAQs. |
| FR-04.07 | Contact for support | System shall allow subscriber to contact to PayPerSurvey Support team. |
| FR-04.08 | Vocation mode | System shall allow subscriber to turn on/off vacation mode. |
| FR-04.09 | History Survey list | System shall allow the subscriber to view History of all responded surveys. |

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| **Result Analysis Module** | | |
| FR-05.01 | View frequency graph | System shall facilitate customer to view Frequency graph result of each question (excluded open ended question) of a survey |
| FR-05.02 | Weighted responses filter | System shall facilitate customer to filter a survey result regarding top specified number of weighted responses |
| FR-05.03 | View list of open ended question list | System shall facilitate customer to view the list of open-ended questions |
| FR-05.04 | view answer of a response | System shall facilitate customer to view answer of a response |

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| **Payment Module** | | |
| FR-05.01 | Buy Response Package | System shall be able to deduct cost of survey according to selected response package |
|  | Payment to subscriber | System shall be able to transfer payment to subscriber on filling a survey |

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| **Honesty badge Module** | | |
| FR-05.01 | View honesty badge | System shall allow the subscriber to his/her honesty badge |
|  | Assign honesty badge | System shell be able to assign honesty badge to each subscriber on the base of T&R system |

Trust and Reputation System

Trust and Reputation System depends on different parameters. These parameters are base for calculating the trust of an individual person. Our proposed system “PayPerSurvey” calculates the trust of a subscriber on the base of following three parameters:

1. Question attempt time (Ta)
2. Constraint Questions (Cq)
3. Work History (Wh)

According to the individual trust category (Gold, Silver and Brown Badge) user will be paid against the surveys.

**1.** **Attempt Time (Ta):**

Attempt time of a question in a survey is the time which user takes for answering of a question. The benchmark time of a question which calculate the user rating on it’s difference.

**How to calculate actual time:**

Bench Mark Time = Number of words of question and its choices + Decision Time (Dt)

Bt = NWt + Dt ----------- (1)

Time Difference = Bench Mark Time - Attempt time

Td = BMt - At -------- (2)

Final equation

**Tdavg = 1\m∑Td**

Where m is the number of questions

**2.** **Constraint Questions:**

To maximize the authentication of each survey response, we have introduced a new term called “2-step authentication”. 2-step authentication means that our system will validate and authenticate each survey response by methods. First method is discussed above as “Attempt time” and as a second step, system will ask a question irrespective form the survey questions. This question will check whether subscriber is responding the survey consciously or not. This constraint question will impact as 0 in case of wrong answer, and 1 in case of right answer.

**3. Work History:**

Work history is associated with a complete record of all surveys. Work history is actually difference between offered surveys and accepted surveys.

Difference = Offered surveys – accepted surveys

**Technology Used for calculation:**

We will use unsupervised machine learning technique which is clustering. We will make three clusters of the subscriber using K-Mean Algorithm.

**Clustering:**

Clustering is a Machine Learning technique that involves the grouping of data points. Given a set of data points, we can use a clustering algorithm to classify each data point into a specific group.

**K-means algorithm:**

K-means clustering is most popular unsupervised machine learning algorithms. In other words, the K-means algorithm identifies k number of centroids, and then allocates every data point to the nearest cluster, while keeping the centroids as small as possible.

## Usability

*[This section includes all those requirements that affect usability. For example,*

* *specify the required training time for a normal users and a power user to become productive at particular operations*
* *specify measurable task times for typical tasks or base the new system’s usability requirements on other systems that the users know and like*
* *specify requirement to conform to common usability standards, such as IBM’s CUA standards Microsoft’s GUI standards]*

### <Usability Requirement One>

*[The requirement description goes here.]*

## Reliability

*[Requirements for reliability of the system should be specified here. Some suggestions follow:*

* *Availability—specify the percentage of time available ( xx.xx%), hours of use, maintenance access, degraded mode operations, and so on.*
* *Mean Time Between Failures (MTBF) — this is usually specified in hours, but it could also be specified in terms of days, months or years.*
* *Mean Time To Repair (MTTR)—how long is the system allowed to be out of operation after it has failed?*
* *Accuracy—specifies precision (resolution) and accuracy (by some known standard) that is required in the system’s output.*
* *Maximum Bugs or Defect Rate—usually expressed in terms of bugs per thousand lines of code (bugs/KLOC) or bugs per function-point( bugs/function-point).*
* *Bugs or Defect Rate—categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a “critical” bug; for example, complete loss of data or a complete inability to use certain parts of the system’s functionality.]*

### <Reliability Requirement One>

*[The requirement description.]*

## Performance

*[The system’s performance characteristics are outlined in this section. Include specific response times. Where applicable, reference related Use Cases by name.*

* *Response time for a transaction (average, maximum)*
* *Throughput, for example, transactions per second*
* *Capacity, for example, the number of customers or transactions the system can accommodate*
* *Degradation modes (what is the acceptable mode of operation when the system has been degraded in some manner)*
* *Resource utilization, such as memory, disk, communications, and so forth.*

### <Performance Requirement One>

*[The requirement description goes here.]*

## Supportability

*[This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, and maintenance utilities.]*

### <Supportability Requirement One>

*[The requirement description goes here.]*

## Design Constraints

*[This section indicates any design constraints on the system being built. Design constraints represent design decisions that have been mandated and must be adhered to. Examples include software languages, software process requirements, prescribed use of developmental tools, architectural and design constraints, purchased components, class libraries, and so on.]*

### <Design Constraint One>

*[The requirement description goes here.]*

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| **1** | *Sequentially list conditions expected at the completion of the use case.* | |
| **2** |  | |
| **n** |  | |
| **Use Case Cross referenced** | | *<Related use cases, which use or are used by this use case>* |
| **User Interface reference** | | *List user interface(s) that are related to this use case. Use numbered list in case of more than one user interface elements.* |

# Learning Outcomes

*[This section of the SRS/DS must highlight the learning outcomes of the project. This can include area of study, tools, technology and/or methodology. Project team must understand what they will learn from their project. This section is concerned more about academic learning.]*

# Practical Applications

*[This section of the SRS/DS contains the practical applications of the project. If it is a research based project then the specific areas must be highlighted where the research can be applicable. In case of pure development projects market segment(s) that the project will cater shall be written down. ]*

# Supporting Information

*[The supporting information makes the* ***SRS/DS*** *easier to use. It includes:*

* *Table of contents*
* *Index*
* *Appendices*

*These may include use-case storyboards or user-interface prototypes. When appendices are included, the* ***SRS/DS*** *should explicitly state whether or not the appendices are to be considered part of the requirements.]*