**Tech Fix**

SRS

Introduced By Group 25

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| 0.2 |  |  |  |
| 0.3 |  |  |  |

**Introduction**

**Executive Summary**

TechFix is an online solution offering technicians and services to everyone. Techfix aim to be the leading software in this field. This solution should offer a great number of technicians in all fields. It will facilitate the work of both technicians and landlords. It should offer experienced technicians for different regions in a fast and safe way. TechFix can be used by everyone like landlords, housewives, employers and even technicians themselves. TechFix can

be viewed on any computer, mobile or tablet. Techfix contains several functions and modules to offer the best interference and reliability between technicians and customers, also between customers and the website itself. TechFix should be considered as a helpful tool for any crises happening within your area or company. In the very soon future Techfix will prove to be efficient and successful through the feedback of customers and technicians.

**Document Overview**

This document introduces TechFix system description and system users. It introduces system modules, system functions, system models, non-functional requirements, domain requirements and system interfaces.

**Abbreviations and Terminologies**

HTML: Hypertext markup language.  
CSS: Cascading style sheets.  
PHP: Personal home page.  
MYSQL: My structured query language.

**References**

www.wikipedia.org  
www.w3Schools.com  
www.stackoverflow.com

**System Description**

**Introduction**

If you in a position where you need to hire a technician but you don’t know exactly how to contact them. TechFix offers a simple and efficient solution to your problems. As TechFix contains the database for plumbers, carpenters, electricians...and many many more technicians to help you fix almost anything at any time. TechFix helps you find the best technician suitable for your problem, by giving you previous feedbacks about him/her from other previous clients. TechFix also informs you about the working hours of that technician, and his/her address if you want to go to the workshop yourself.

**Modules**

* **Feedback module**
  + This module allow the user after hiring a technician to give him a feedback based on his work
* **User Profile module**
  + This allow the user to make a profile for himself to easily use the website
* **Tech profile module**
  + This allow the technician to build a profile for himself with all his contact information so the user can reach him
* **Search module**
  + This module make the searching for the technician process easy for the user
* **Administration Module**
  + Allow the admin to edit and manage the website easily

**Users**

* **Client** 
  + the normal user who can enter the site and find the technician he wants.
* **Technician** 
  + The technician user help the technician to be reached by the clients.
* **Administration user**
  + The admin or the manager user for the website.

**System Users**

Our website users are divided into 2 categories

1. Technician
2. Client

**Technician**

**Technician description**

Technician is including any person who has a certain craft and wants to expand his business online by join TechFix community like

* **Carpenter**

A person who makes and repairs wooden objects and structures.

* **Plumber**

A person who installs and repairs the pipes and fittings of water supply, sanitation.

* **Electrician**

A person who installs and maintains electrical equipment.

* **Mechanic**

A person who repairs and maintains machinery.

* **Craftsman**

A person skilled in creating something with a specified material.

**Technician activities**

* **Create Account**

Technician can create an account in order to participate in the website. Technician can sign up by providing

* forename
* last Name
* date of birth
* country and city
* email
* password
* telephone number
* fax number (If available)
* name of business
* type of service
* description of his/her provided services
* workshop address
* average working hours and days
* **Add Introduction Video**

The technician can provide an introductory video presenting himself/herself, which services are provided and show some of their skills and samples of his/her previous works. The video will always be shown at the technician profile for all the clients to see.

* **Manage Working Hours**

After the technician sets his/her average working hours at the beginning when setting the account, he/she will always have the option to edit these working hours according to their needs, circumstances and national days off.

* **Delete Account**

Every Technician will have the ability to deactivate and delete his/her account to be deleted from TechFix databases. But that deletion is permanent and can’t be undone once the technician goes through with it.

**Client**

**Client description**

Client is anyone who has a problem and wants to find an easier way to find a right technician for his/her problem like someone who need an electrician to fix a specific problem about his/her home’s electrical system or a someone who need a carpenter to repair or make something for him/her.

**Client activities**

* **Create Account**

The clients can create an account to participate in the site through which he can see the technicians and the type of service they provide and describe their services. The client creates an account by providing

* forename
* last Name
* email
* password
* city and region where they can find technicians closest to their area
* **Forgetting Password**

If a client has forgotten his/her password and he/she previously entered an email address when signing up, and you still have access to that email account, then this feature can help him/her to recover his/her access to his/her account. Just choose password reset, where you can enter either your username or your email. The system will send a temporary password to your saved email address that will allow you to retrieve your account. You can change the password after you log in.

* **Change Password**

The system provides the clients the ability to change the password. If the client chooses to change his/her password, he/she will then be asked to enter his/her old password to confirm his/her identity, after the identity of the client is confirmed he/she are then asked to enter the new password, then save it. Once the new password is set, the old password is useless and that step of changing the password can’t be undone.

* **Search for technician**

it can be done by many filters such as:

* Search by Name

Client can search for a specific name directly, without the need for the client to scroll along the whole TechFix database for that specific name.

* Search by Location

Because sometimes the clients need something to be fixed as fast as possible. Client can search results by location. In order for the clients to get a technician from the nearby regions to fix his/her problem as quick as possible.

* Search by Category

Client can choose which service he/she needs and then the search will show only the technicians who provide that service between different types of technicians’ categories including (Carpenters, Plumbers, Electricians, ...etc.).

* **Write feedback**

Client can write his/her feedback about the satisfaction or dissatisfaction they felt with the technician or the service. After a job is done by one of the technicians provided by TechFix, the clients are asked to provide comments, feedbacks and ratings about that technician.

* **Delete Account**

Every client in the website will have the ability to deactivate and delete his/her account to which will then be deleted from TechFix databases. But that deletion is permanent and can’t be undone once the client goes through with the process.

**System Modules**

**User profile Module**

This module makes the user able to sign up or sign in , enter his information like (name, email and mobile phone ) . so, he will be able to use the feedback module and also recommend a new technician to the website.

**Technician profile Module**

This module makes the technician able to sign up or sign in and enter his information like name, email, mobile phone, job description, photo, address of his workshop, available days &hours during the week and his vacations.

**Search Module**

This module makes the user able to search for a technician by name or area or category.

**Feedback Module**

This module makes the user able to rate the technician that he ordered and also write comments on him.

**Administration Module (optional)**

This module makes the admin/owner of the website able to add or remove accounts and edit the database.

**System Functions**

* **User Profile module Functions**
  + **Feedback function**
    - **Code:** [UP\_M\_F]
    - **Description:** 
      * Give a rating : the user will be able to give a rate from to 1 to 5 the technician and the accumulated rate will appear at the technician profile
      * Write a comment: the user will be able to write a written feedback about the technician work.
    - **Input:** the input for this functions is a paragraph written by the user or a number he select.
    - **Output:** the output will be in a form of text in the technician profile or an accumulated number.
  + **User Profile Editing Function**
    - **Code:** [UP\_M\_E]
    - **Description:** The user will be able to
      * Edit his name
      * Edit his phone number
      * Change the searching area
    - **Input:** the edited name or phone number or any information wanted to edit
    - **Output:** the personal information desired to be changed will be rewritten immediately.
    - **Pre-conditions:** the user must have an account on the website before he try to edit it.
  + **Search Function**
    - **Code:** [UP\_M\_S]
    - **Description:**
      * The user can search for a technician name
      * The user can narrow the search to limited rating
      * The user can add more areas to search in it
    - **Input:** the name that user wanted to search for.
    - **Output:** all the related technician to the name that was entered will be listed.
    - **Pre-conditions:** the user must have an account on the website before he search.
* **Technician Profile Functions**
  + **Technician Profile Editing Function**
    - **Code:** [TP\_M\_E]
    - **Description:** The technician will be able to:
      * Edit his name
      * Edit his contact info
      * Edit his working area
      * Edit his photo
      * Edit his working hours
    - **Input:** the edited name or phone number or any information wanted to edit
    - **Output:** the personal information desired to be changed will be rewritten immediately.
    - **Pre-conditions:** the Technician must have an account on the website before he try to edit it.
* **Administration Functions**
  + The admin can delete account
  + Add new technician accounts
  + Delete comments

**Non-Functional Requirements**

**Security**

User can register/login using internal accounts or via their phones or common social accounts. The portal access is made using https protocol in order to secure the communication. Security also is responsible for managing the permissions and roles. Users are either Technician account or User account.

**Usability Requirement**

An interface should be easy to learn how to use and easy to remember how to use. The latter pertains especially to devices that require infrequent use. Users should not be required to consult a manual each time they need to use a kitchen blender for instance.Usability Requirements for an interface design should support the following from the perspective of its primary users:

* Efficiency of use:  goals are easy to accomplish quickly and with few or no user errors
* Intuitiveness:  the interface is easy to learn and navigate; buttons, headings, and help/error messages are simple to understand
* Low perceived workload:  the interface appears easy to use, rather than intimidating, demanding and frustrating

**Performance Requirement**

**Performance**

The system must be interactive and the delays involved must be less as can as possible. So in every action-response of the system, there are no immediate delays. In case of opening windows forms, of popping error messages and saving the settings or sessions there is delay much below 2 seconds

**Safety**

Information transmission should be securely transmitted to server without any changes in information.

**Reliability**

As the system provides the right tools for discussion, problem solving it must be made sure that the system is reliable in its operations and for securing the sensitive details.

**Technology Requirements**

Targeting -the most common free technology nowadays- which is the internet. This will provide our services almost to everyone.

**Development Requirements**

This site provides a further development after delivery through admin user without any codes.

**Delivery Requirements**

The service overall will be easy to access and delivered to the user. Also the website with the database will be delivered to the admin user.

**Operation Requirements**

A user friendly operation allows the user to easily use and navigate through our website

**Domain Requirements:**

• Clients personal data like his address or phone number will be invisible so it will be not allowed for any one to dig in others information .

• Technician data like his work location or phone number will be visible but it will be not allowed for any one to change his information.

• The clients’ feedbacks offer information coming directly from the clients themselves about the satisfaction or dissatisfaction they felt with the technician or the service.

Clients comments and complaints given to TechFix are an important resource for improving the technicians and addressing the needs and wants of the clients. regardless positive or negative feedback it will be taken in consideration but any disrespectful comment will be dismissed.

• Technician can create an account in order to participate in the website. Technician can sign up by providing his/her forename, last Name, date of birth, name of business and type of service. The technician can also add a thorough description of his/her provided services. Technician will provide his/her email, password, telephone number, Fax number (If available) in order for the clients to be able to contact him/her, after that he/she will pass through a verification process to make sure that he/she able to work with us.