

# ON ROAD FUEL SUPPLY

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**Abstract:** Now-a-days, vehicles play main role of transportation. Due to growth of automobiles in market, fuel consumption became more. Unfortunately, sometimes vehicle stops due to lack of petrol, where owners find difficulty to find nearest petrol pump. In some cases, people go to new location and sometimes they will not be having any idea of the gas stations to refuel their vehicles.

Even Petrol Bunk owners also face many problems like Regardless of whether you run a branded or unbranded retail fuel location, one challenge you can count on is the unexpected. Emergencies happen on their own timetable and can cause disruptions for your customers if they are not handled quickly.

**Keywords:** Desktop Application, Career Guidance, counselling System, Entrance exam, and eligibility criteria.

## I. INTRODUCTION

The specific problem, which can be discussed during this paper, may be a variant of the capacitated vehicle routing problem and occurs within the context of fuel distribution. More precisely, the paper deals with the daily replenishment-planning problem that the most important Algerian petroleum company is facing. The corporate has to deliver different fuel types ordered by a group of petrol stations during subsequent working day. These stations order one or more fuel types whenever and specify the number to be delivered for every product ordered. The products are incompatible and must be transported in independent vehicle compartments.

## II. LITERATURE REVIEW

Choosing a college degree is a huge life decision, and it is the most frequently cited life regret among Americans, according to study [1]. The Chronicle of Higher Education is a newspaper and website that provides news, information, and career opportunities for professors and student affairs workers in colleges and universities [7] (staff members and administrators [2]. Some articles require a subscription to read. This study investigates how personality-professional fit influences early medical career aspirations among college freshmen, as well as the extent to which such fit is related to the continuation or abandonment of such aspirations [3]. The volume of research on shadow education has expanded dramatically, assisting in a better understanding of the phenomenon's scope, nature, and repercussions. The literature on shadow schooling is riddled with ambiguous terms and limits, and data collection is difficult since actors may be unwilling or unable to answer to inquiries in a clear manner [4].

This study examines the external and internal elements that influence student's decisions about which career path to pursue, as well as identifying and ranking the most important factors. This research also adds to our understanding of the least important elements [5].

## III. EXISTING SYSTEM

There is a website already available in market whose server is mostly down and not available to the users in time. Website cannot have used by the users to the time of necessity. There is also a huge complaint on the website about advertising many promotions.

## 3. DISADVANTAGES

- Server is down mostly.
- Website cannot be loaded properly.
- Slow Loading because of audit promotions.
- No proper user Interface

## IV. PROPOSED SYSTEM

Proposed system is a web application that provides proper facility of getting fuel properly to the user to their mentioned locations. It has a User Friendly interface with on time fuel delivery facility, with 24 / 7 availability.

## 5. ADVANTAGES:

- In time delivery.
- 24\*7 availability for fuel delivery.
- Easy User Interface.
- Server Problems Are Rectified.
- No audit promotions.

## V. Module Description:

Implementation is the stage of the project when the theoretical design is turned out into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective.

The implementation stage involves careful planning, investigation of the existing system and its constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods. After careful analysis the system has been identified to have the following modules:

1. Admin Module
2. User Module
3. Fuel Station Module
4. Authentication Module

### 1. Admin Module

From this module, Admin can login to the website. Admin is like a user but with some extra functionalities. There are some operations only admin can perform like removing users, accepting order requests, Checking Availability. Only admin can add new Fuel Station in the site. Only admin can view reports and statistics.

### 2. User Module:

The user module allows users to register, log in, and log out. From this module, user can search for nearest Fuel Station and can order Fuel to their location.

The registration requires user to fill all the details in the form like name, email, password, etc. Once the user is registered then only he/she can log in to the site with those details. Once the user is logged in, he/she can choose nearest fuel station and can make online payment through the site or he/she has an option of COD.

### 3. Fuel Station Module

This Fuel Module allows nearby Fuel stations to register their Location in the website. All nearby Fuel Stations has to register first in the website in order to make an order by the customer. So that when an order is placed in the website the respective Fuel Station Receives the order thus they can approve the status.

### 4 Authentication Module:

This module authenticates the username and password entered by the user or admin.

If the username and password matches with the data in the database then only it will allow to login. If the user or admin forget their password then they can reset it using reset password. Reset password requires their email to reset password.

## VI. SYSTEM TEST

### I. White Box Testing

White Box Testing is a type of testing in which the software tester is familiar with the inner workings, structure, and language of the software, or at the very least its purpose. It serves a purpose. It is used to test areas that are inaccessible from a black box level.

### II. Black Box Testing

Black Box Testing is the process of testing software without knowing anything about the inner workings, structure, or language of the module being tested. Black box tests, like the majority of other types of tests, must be written from a definitive source document, such as a specification or requirements document. It is a type of testing in which the software under test is treated as if it were a black box.

### III. Unit Testing

Unit testing is typically performed as part of the software lifecycle's combined code and unit test phase, though it is not uncommon for coding and unit testing to be performed separately.

### Test strategy and approach

Field testing will be performed manually and functional tests will be written in detail.

### Test objectives

- All field entries must function properly.
- Pages must be accessed via the specified link.
- The entry screen, messages, and responses must all be instantaneous.

### Features to be tested

- Verify that the entries are of the correct format
- No duplicate entries should be allowed.
- All links should take the user to the correct page.

### iv. Integration Testing

Software integration testing is the progressive integration testing of two or more integrated software components on a single platform to induce failures caused by interface issues. The integration test ensures that components or software applications, such as those found in a software system or – on a higher level – software applications at the corporate level, interact correctly.

**Test Results:**

All the test cases mentioned above passed successfully. No defects encountered.

**v. Acceptance Testing**

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

**Test Results:**

All the test cases mentioned above passed successfully. No defects encountered.

**VII. FUTURE SCOPE**

Since we are supplying only within a range ( city ). Can be developed to deliver fuel for long distance customers also. It is planned to increase the security by providing the captcha entry while registering. It is be even improved with the introduction of notifications. Currently this app doesn't support notifications due to some financial problems.

**VIII. CONCLUSIONS**

As said earlier above project, which is implemented, reduce Customer Traffic in Petrol Bunks. Unfortunately, Sometimes vehicle stops due to lack of petrol, where owners find difficulty to find nearest petrol pump. For example, you may need a fuel delivery outside normal working hours. This may be due to a sudden customer rush, or tightening of the oil supply or a weather-related emergency. One way fuel retailers can proactively address this challenge is to partner with a retail fuel service that will make deliveries when you need it, even if it's outside of your established schedule. Routing is another challenge faced by fuel retailers. Some fueling stations are located in remote areas. This can make it tricky to find a dependable fuel supplier. Fuel retailers must also factor in variable road conditions.

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