

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
“JNANA SANGAMA” BELAGAVI-590018, KARNATAKA



A DATABASE MANAGEMENT SYSTEM MINI PROJECT REPORT

On

“FARM MANAGEMENT SYSTEM PROJECT”

Submitted in partial fulfillment of Bachelor of Engineering Degree

In

COMPUTER SCIENCE AND ENGINEERING

V Semester, **21CSL55–DBMS Laboratory and Mini Project**

Submitted By

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CERTIFICATE

This is to certify that the Mini Project report entitled “**FARM MANAGEMNENT SYSTEM PROJECT**” is a bonafied work carried out by **KISHORE KUMAR S, 1BO21CS029** in the fulfillment for the requirements of Fifth Semester, **Bachelor of Engineering in Information Science and Engineering of Visvesvaraya Technological University, Belagavi** during the year 2023-24. It is certified that all corrections and suggestions indicated for the internal assessment have been incorporated in the report. This Database Management System Mini project report has been approved as it satisfies the academic requirements in respect to the work prescribed for the Bachelor of Engineering degree.

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Name of the Examiners

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Signature with Date

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KISHORE KUMAR S (1BO21CS029)

ABSTRACT

In the ever-evolving landscape of agriculture, fostering a direct connection between farmers and buyers has become paramount. This website aims to bridge the gap between these two vital players, creating a platform that empowers informed decisions and facilitates a thriving agricultural ecosystem. By eliminating unnecessary intermediaries, farmers gain greater control over their products, securing a fair return for their efforts. Buyers, on the other hand, benefit from access to fresh, high-quality produce directly from the source, fostering transparency and trust throughout the supply chain. This website goes beyond mere transactions, however. It serves as a valuable resource center, equipping both farmers and buyers with the information they need to succeed. Farmers can leverage market trends, pricing data, and best practice guides to optimize their operations. Buyers gain access to detailed product listings, clear communication channels, and insights into the sustainable practices employed by the farmers they choose to support. Ultimately, this website aspires to cultivate a community built on shared values, where both farmers and buyers can work together to ensure a future of ethical, environmentally responsible food production and consumption.

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CHAPTER-1

INTRODUCTION

1.1 OBJECTIVES:

- The main objective of the project is to design and develop a user friendly-system
- Easy to use and an efficient computerized system.
- To develop an accurate and flexible system, it will eliminate data redundancy.
- To study the functioning of Farm management System.
- To make a software fast in processing, with good user interface.
- To make software with good user interface so that user can change it and it should be used for a long time without error and maintenance.
- To provide synchronized and centralized farmer and seller database.
- Computerization can be helpful as a means of saving time and money.
- To provide better Graphical User Interface (GUI).
- Less chances of information leakage.
- Provides Security to the data by using login and password method.
- To provide immediate storage and retrieval of data and information.
- Improving arrangements for farmers co-ordination.
- Reducing loss.

1.2 LIMITATIONS:

- Small size of **farm** business: Due to fragmentation and subdivision of holding the average size of operational holdings is very small
- Less labour per unit areas is required to **farm** large areas, especially since expensive alterations to land (like terracing) are completely absent.
- Mechanisation can be used more effectively over large, flat areas

CHAPTER-2

STUDY OF EXISTING SYSTEM

2.1 CASE STUDY

SourceTrace is collaborating with Small Farmers Agri-business consortium (SFACH) and Karnataka Horticulture Department, deploying its digital solutions to support the horticulture farmers of India. Karnataka Agriculture Department is committed to providing a responsive and effective mechanism for the welfare of farmers and farm-based communities and recognizes the need to harness the growing power of Information Technologies for the betterment of life of the farmers and management of Farmer Producer Organizations (FPOs) in Haryana. To deploy its digital solution, Source Trace is in the process of creating 100,000 farmer profiles. The system was developed using technologies such as, HTML, CSS ,JS and MySQL. PYTHON- FLASK, HTML and CSS are used to build the user interface and database was built using MySQL. The system is free of errors and very efficient and less time consuming due to the care taken to develop it. All the phases of software development cycle are employed and it is worthwhile to state that the system is very robust. Provision is made for future development in the system.

2.2 PROPOSED SYSTEM

The farmers can sell their productions online and the buyer can purchase various agricultural products online. Buyer can send purchase request to check the quality of the product. After collecting all the farm produce from the farmers, it should be sold to the customers. This project covers these entries and the data collections. There are 2 types of users: Customer & Farmers. The login id and password must be required to login the system. The article and agro products section helps farmers to share their products and increase profitability.

CHAPTER 3

DATABASE DESIGN

3.1 SOFTWARE REQUIREMENTS SPECIFICATION

3.1.2

SOFTWARE REQUIREMENTS:

Frontend- HTML, CSS, Java Script, Bootstrap

Backend-Python flask (Python 3.7) , SQLAlchemy,

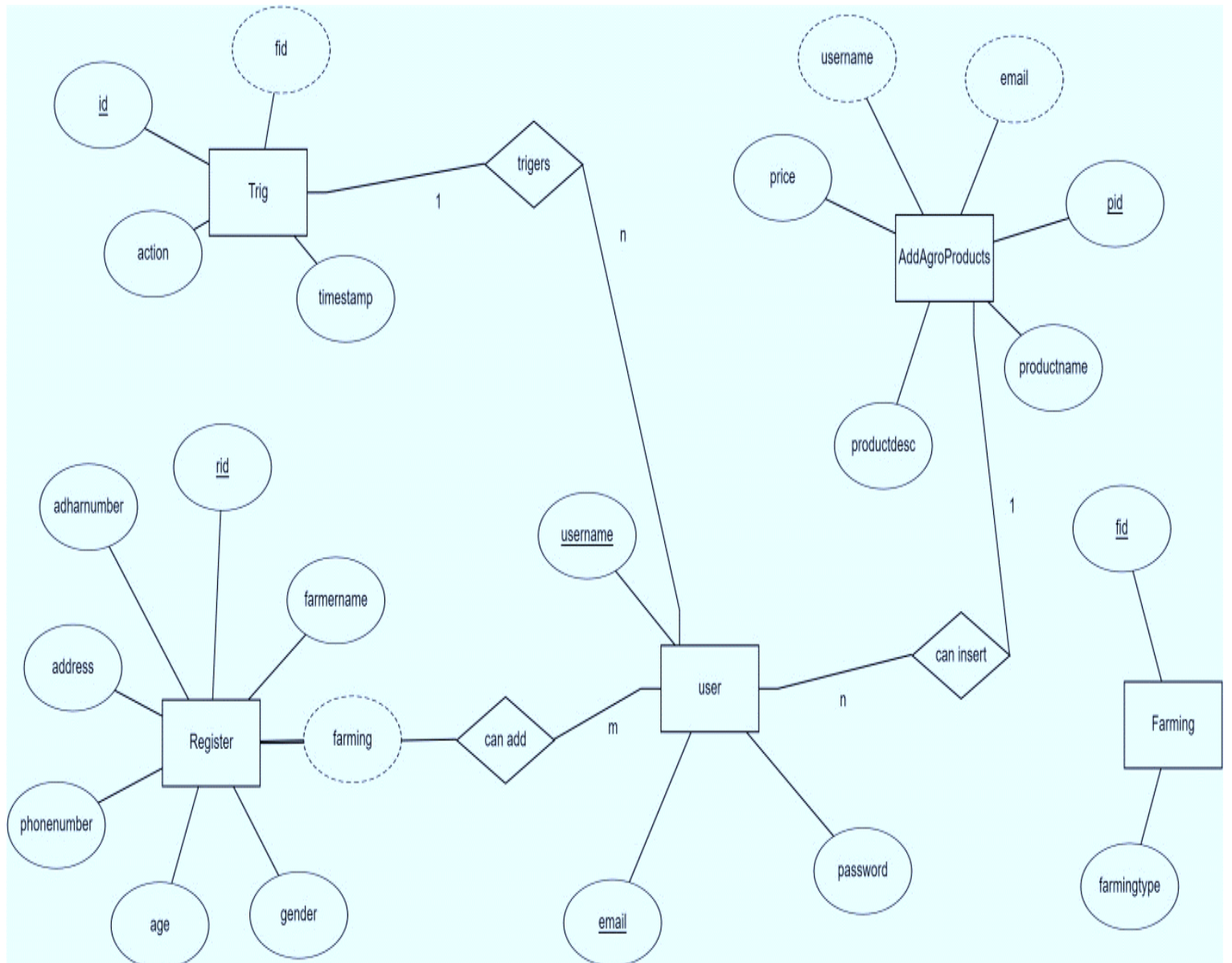
- Operating System: Windows 10
- Google Chrome/Internet Explorer
- XAMPP (Version-3.7)
- Python main editor (user interface): PyCharm Community
- workspace editor: Sublime text 3

HARDWARE REQUIREMENTS:

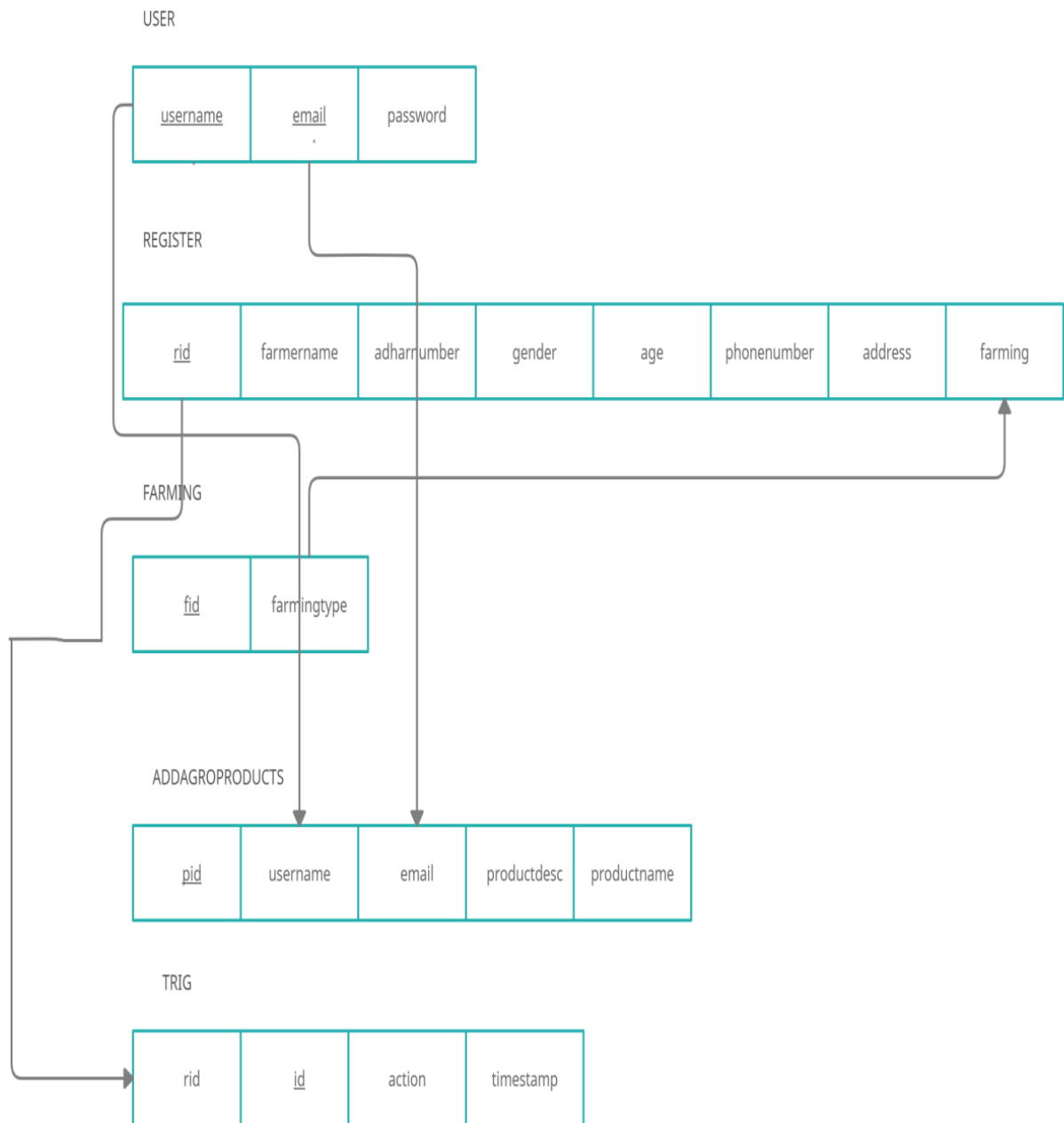
- Computer with a 1.1 GHz or faster processor
- Minimum 2GB of RAM or more
- 2.5 GB of available hard-disk space
- 5400 RPM hard drive
- 1366 × 768 or higher-resolution display
- DVD-ROM drive

3.2 CONCEPTUAL DESIGN:

3.2.1 E-R DIAGRAM:



3.2.2 SCHEMA DIAGRAM:



3.3 IMPLEMENTATION:

An "implementation" of Python should be taken to mean a program or environment which provides support for the execution of programs written in the Python language, as represented by the [CPython](#) reference implementation.

There have been and are several distinct software packages providing of what we all recognize as Python, although some of those are more like distributions or variants of some existing implementation than a completely new implementation of the language.

BackEnd (MySQL)

Database:

A Database Management System (DBMS) is computer software designed for the purpose of managing databases, a large set of structured data, and run operations on the data requested by numerous users. Typical examples of DBMSs include Oracle, DB2, Microsoft Access, Microsoft SQL Server, Firebird, PostgreSQL, MySQL, SQLite, FileMaker and Sybase Adaptive Server Enterprise. DBMSs are typically used by Database administrators in the creation of Database systems. Typical examples of DBMS use include accounting, human resources and customer support systems. Originally found only in large companies with the computer hardware needed to support large data sets, DBMSs have more recently emerged as a fairly standard part of any company back office.

A DBMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database. A DBMS includes:

- A modeling language to define the schema of each database hosted in the DBMS, according to the DBMS data model.
- The dominant model in use today is the ad hoc one embedded in SQL, despite the objections of purists who believe this model is a corruption of the relational model, since it violates several of its fundamental principles for the sake of practicality and performance. Many DBMSs also support the Open Database Connectivity API that supports a standard way for programmers to access the DBMS.

Data structures (fields, records, files and objects) optimized to deal with very large amounts of data stored on a permanent data storage device (which implies relatively slow access compared to volatile main memory). A database query language and report

writer to allow users to interactively interrogate the database, analyze its data and update it according to the users privileges on data.

- Data security prevents unauthorized users from viewing or updating the database. Using passwords, users are allowed access to the entire database or subsets of it called sub schemas. For example, an employee database can contain all the data about an individual employee, but one group of users may be authorized to view only payroll data, while others are allowed access to only work history and student data.
 - If the DBMS provides a way to interactively enter and update the database, as well as interrogate it, this capability allows for managing personal databases. However, it may not leave an audit trail of actions or provide the kinds of controls necessary in a multi-user organization. These controls are only available when a set of application programs are customized for each data entry and updating function.
- ✓ A transaction mechanism, that ideally would guarantee the ACID properties, in order to ensure data integrity, despite concurrent user accesses (concurrency control), and faults (fault tolerance).
- It also maintains the integrity of the data in the database.
 - The DBMS can maintain the integrity of the database by not allowing more than one user to update the same record at the same time. The DBMS can help prevent duplicate records via unique index constraints; for example, no two customers with the same customer numbers (key fields) can be entered into the database. See ACID properties for more information (Redundancy avoidance).

When a DBMS is used, information systems can be changed much more easily as the organization's information requirements change. Organizations may use one kind of DBMS for daily transaction processing and then move the detail onto another computer that uses another DBMS better suited for random inquiries and analysis. Overall systems design decisions are performed by data administrators and systems analysts. Detailed database design is performed by database administrators.

SQL:

Structured Query Language (SQL) is the language used to manipulate relational databases. SQL is tied very closely with the relational model.

- In the relational model, data is stored in structures called relations or tables.

SQL statements are issued for the purpose of:

- Data definition: Defining tables and structures in the database (DDL used to create, alter and drop schema objects such as tables and indexes)

4.2 : Stored Procedure

Routine name: proc

Type: procedure

Definition: Select * from register;

4.3: Triggers

It is the special kind of stored procedure that automatically executes when an event occurs in the database.

Triggers used :

1: Trigger name: on insert

Table: register

Time: after

Event: insert

INSERT INTO trig VALUES(null,NEW.rid,'Farmer Inserted',NOW())

2: Trigger name: on delete

Table: register

Time: after

Event: delete

Definition: INSERT INTO trig VALUES(null,OLD.rid,'FARMER DELETED',NOW())

3: Trigger name: on update

Table: register

Time: after

Event: update

Definition: INSERT INTO trig VALUES(null,NEW.rid,'FARMER UPDATED',NOW())

BACKEND PYHTON WITH MYSQL CODE

```
from flask import Flask,render_template,request,session,redirect,url_for,flash
from flask_sqlalchemy import SQLAlchemy
from flask_login import UserMixin
from werkzeug.security import generate_password_hash,check_password_hash
from flask_login import login_user,logout_user,login_manager,LoginManager
from flask_login import login_required,current_user

# MY db connection
local_server= True
app = Flask( name )
app.secret_key='harshithbhaskar'

# this is for getting unique user access
login_manager=LoginManager(app)
login_manager.login_view='login'

@login_manager.user_loader
def load_user(user_id):
    return User.query.get(int(user_id))

#
app.config['SQLALCHEMY_DATABASE_URL']='mysql://username:password@localhost/databas_table_
name'
app.config['SQLALCHEMY_DATABASE_URI']='mysql://root:@localhost/farmers'
db=SQLAlchemy(app)

# here we will create db models that is tables
class Test(db.Model):
    id=db.Column(db.Integer,primary_key=True)
    name=db.Column(db.String(100))

class Farming(db.Model):
    fid=db.Column(db.Integer,primary_key=True)
    farmingtype=db.Column(db.String(100))
```



```
class Addagroproducts(db.Model):
    username=db.Column(db.String(50))
    email=db.Column(db.String(50))
    pid=db.Column(db.Integer,primary_key=True)
    productname=db.Column(db.String(100))
    productdesc=db.Column(db.String(300))
    price=db.Column(db.Integer)
```

```
class Trig(db.Model):
    id=db.Column(db.Integer,primary_key=True)
    fid=db.Column(db.String(100))
    action=db.Column(db.String(100))
    timestamp=db.Column(db.String(100))
```

```
class User(UserMixin,db.Model):
    id=db.Column(db.Integer,primary_key=True)
    username=db.Column(db.String(50))
    email=db.Column(db.String(50),unique=True)
    password=db.Column(db.String(1000))
```

```
class Register(db.Model):
    rid=db.Column(db.Integer,primary_key=True)
    farmername=db.Column(db.String(50))
    adharnumber=db.Column(db.String(50))
    age=db.Column(db.Integer)
    gender=db.Column(db.String(50))
    phonenumber=db.Column(db.String(50))
    address=db.Column(db.String(50))
    farming=db.Column(db.String(50))
```

```
def index():
    return render_template('index.html')

@app.route('/farmerdetails')
@login_required
def farmerdetails():
    query=db.engine.execute(f"SELECT * FROM `register`")
    return render_template('farmerdetails.html',query=query)

@app.route('/agroproducts')
def agroproducts():
    query=db.engine.execute(f"SELECT * FROM `addagroproducts`")
    return render_template('agroproducts.html',query=query)

@app.route('/addagroproduct',methods=['POST','GET'])
@login_required
def addagroproduct():
    if request.method=="POST":
        username=request.form.get('username')
        email=request.form.get('email')
        productname=request.form.get('productname')
        productdesc=request.form.get('productdesc')
        price=request.form.get('price')

        products=Addagroproducts(username=username,email=email,productname=productname,productdesc=productdesc,price=price)
        db.session.add(products)
        db.session.commit()
        flash("Product Added","info")
        return redirect('/agroproducts')

    return render_template('addagroproducts.html')

@app.route('/triggers')
@login_required
def triggers():
    query=db.engine.execute(f"SELECT * FROM `trig`")
    return render_template('triggers.html',query=query)
```

```
@app.route('/addfarming',methods=['POST','GET'])
@login_required
def addfarming():
    if request.method=="POST":
        farmingtype=request.form.get('farming')
        query=Farming.query.filter_by(farmingtype=farmingtype).first()
        if query:
            flash("Farming Type Already Exist","warning")
            return redirect('/addfarming')
        dep=Farming(farmingtype=farmingtype)
        db.session.add(dep)
        db.session.commit()
        flash("Farming Addes","success")
    return render_template('farming.html')
```

```
@app.route("/delete/<string:rid>",methods=['POST','GET'])
@login_required
def delete(rid):
    db.engine.execute(f"DELETE FROM `register` WHERE `register`.`rid`={rid}")
    flash("Slot Deleted Successful","danger")
    return redirect('/farmerdetails')
```

```
@app.route("/edit/<string:rid>",methods=['POST','GET'])
@login_required
def edit(rid):
    farming=db.engine.execute("SELECT * FROM `farming`")
    posts=Register.query.filter_by(rid=rid).first()
    if request.method=="POST":
        farmername=request.form.get('farmername')
        adharnumber=request.form.get('adharnumber')
        age=request.form.get('age')
        gender=request.form.get('gender')
        phonenumber=request.form.get('onenumber')
```

```
address=request.form.get('address')
farmingtype=request.form.get('farmingtype')
query=db.engine.execute(f"UPDATE `register` SET
`farmername`='{farmername}',`adharnumber`='{adharnumber}',`age`='{age}',`gender`='{gender}',`phonenu
mber`='{phonenumner}',`address`='{address}',`farming`='{farmingtype}'")
flash("Slot is Updates","success")
return redirect('/farmerdetails')

return render_template('edit.html',posts=posts,farming=farming)
```

```
@app.route('/signup',methods=['POST','GET'])
```

```
def signup():
```

```
    if request.method == "POST":
```

```
        username=request.form.get('username')
```

```
        email=request.form.get('email')
```

```
        password=request.form.get('password')
```

```
        print(username,email,password)
```

```
        user=User.query.filter_by(email=email).first()
```

```
        if user:
```

```
            flash("Email Already Exist","warning")
```

```
            return render_template('/signup.html')
```

```
        encpassword=generate_password_hash(password)
```

```
        new_user=db.engine.execute(f"INSERT INTO `user` (`username`,`email`,`password`) VALUES
('{username}','{email}','{encpassword}')")
```

```
        # this is method 2 to save data in db
```

```
        # newuser=User(username=username,email=email,password=encpassword)
```

```
        # db.session.add(newuser)
```

```
        # db.session.commit()
```

```
        flash("Signup Succes Please Login","success")
```

```
        return render_template('login.html')
```

```
return render_template('signup.html')
```

```
@app.route('/login',methods=['POST','GET'])
def login():
    if request.method == "POST":
        email=request.form.get('email')
        password=request.form.get('password')
        user=User.query.filter_by(email=email).first()

        if user and check_password_hash(user.password,password):
            login_user(user)
            flash("Login Success","primary")
            return redirect(url_for('index'))
        else:
            flash("invalid credentials","danger")
            return render_template('login.html')

    return render_template('login.html')
```

```
@app.route('/logout')
@login_required
def logout():
    logout_user()
    flash("Logout SuccessFul","warning")
    return redirect(url_for('login'))
```

```
@app.route('/register',methods=['POST','GET'])
@login_required
def register():
    farming=db.engine.execute("SELECT * FROM `farming`")
    if request.method=="POST":
        farmername=request.form.get('farmername')
        adharnumber=request.form.get('adharnumber')
        age=request.form.get('age')
        gender=request.form.get('gender')
        phonenumber=request.form.get('phonenumber')
        address=request.form.get('address')
        farmingtype=request.form.get('farmingtype')
```

```
query=db.engine.execute(f"INSERT INTO `register`
(`farmername`,`adharnumber`,`age`,`gender`,`phonenumber`,`address`,`farming`) VALUES
('{farmername}','{adharnumber}','{age}','{gender}','{phonenumber}','{address}','{farmingtype}')"
flash("Your Record Has Been Saved","success")
return redirect('/farmerdetails')
return render_template('farmer.html',farming=farming)
```

```
@app.route('/test')
```

```
def test():
```

```
    try:
```

```
        Test.query.all()
```

```
        return 'My database is Connected'
```

```
    except:
```

```
        return 'My db is not Connected'
```

```
app.run(debug=True)
```

FRONT END CODE

```
<!DOCTYPE html>
<html lang="en">
<head>

<meta content="width=device-width, initial-scale=1.0" name="viewport">

<title>{ % block title % }
{ % endblock title % }</title>
<meta content="" name="description">
<meta content="" name="keywords">

{ % block style % }
{ % endblock style % }

<link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,700,700i|Raleway:300,400,500,700,800" rel="stylesheet">

<!-- Vendor CSS Files -->
<link href="static/assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
<link href="static/assets/vendor/venobox/venobox.css" rel="stylesheet">
<link href="static/assets/vendor/font-awesome/css/font-awesome.min.css" rel="stylesheet">
<link href="static/assets/vendor/owl.carousel/assets/owl.carousel.min.css" rel="stylesheet">
<link href="static/assets/vendor/aos/aos.css" rel="stylesheet">

<!-- Template Main CSS File -->
<link href="static/assets/css/style.css" rel="stylesheet">
</head>

<body>

<!-- ===== Header ===== -->
<header id="header">
<div class="container">

<div id="logo" class="pull-left">
<a href="/" class="scrollto">F.M.S</a>
</div>
nav id="nav-menu-container">
```

```
<ul class="nav-menu">
  <li class="{ % block home % }" ><a href="/">Home</a></li>

  <li><a href="/register">Farmer Register</a></li>
  <li><a href="/addfarming">Add Farming</a></li>
  <li><a href="/farmerdetails">Farmer Details</a></li>
  <li><a href="/agroproducts">Agro Products</a></li>
  <li><a href="/triggers">Records</a></li>

  { % if current_user.is_authenticated % }
    <li class="buy-tickets"><a href="">Welcome { {current_user.username} }</a></li>
    <li class="buy-tickets"><a href="/logout">Logout</a></li>
  { % else % }
    <li class="buy-tickets"><a href="/signup">Signin</a></li>

  { % endif % }
</ul>

</nav><!-- #nav-menu-container -->
</div>
</header><!-- End Header -->

<!-- ===== Intro Section ===== -->
<section id="intro">
  <div class="intro-container" data-aos="zoom-in" data-aos-delay="100">
    <h1 class="mb-4 pb-0">SELL AGRO PRODUCTS AND BUY </span> </h1>
    <p class="mb-4 pb-0">DBMS Mini Project Using Flask & MYSQL</p>

    <a href="/agroproducts" class="about-btn scrollto">AGRO PRODUCTS</a>
  </div>
</section><!-- End Intro Section -->

<main id="main">
```


{% block body %}

{% with messages=get_flashed_messages(with_categories=true) %}

{% if messages %}

{% for category, message in messages %}

<div class="alert alert-{{ category }}" alert-dismissible fade show" role="alert">

{{ message }}

</div>

{% endfor %}

{% endif %}

{% endwith %}

{% endblock body %}

<i class="fa fa-angle-up"></i>

<!-- Vendor JS Files -->

<script src="static/assets/vendor/jquery/jquery.min.js"></script>

<script src="static/assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<script src="static/assets/vendor/jquery.easing/jquery.easing.min.js"></script>

<script src="static/assets/vendor/php-email-form/validate.js"></script>

<script src="static/assets/vendor/venobox/venobox.min.js"></script>

<script src="static/assets/vendor/owl.carousel/owl.carousel.min.js"></script>

<script src="static/assets/vendor/superfish/superfish.min.js"></script>

<script src="static/assets/vendor/hoverIntent/hoverIntent.js"></script>

<script src="static/assets/vendor/aos/aos.js"></script>

<!-- Template Main JS File -->

<script src="static/assets/js/main.js"></script>

</body>

```
</html> <!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta content="width=device-width, initial-scale=1.0" name="viewport">

  <title>{% block title %}
  {% endblock title %}</title>
  <meta content="" name="description">
  <meta content="" name="keywords">

  {% block style %}
  {% endblock style %}
  <link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,700,700i|Raleway:300,400,50
0,700,800" rel="stylesheet">

  <!-- Vendor CSS Files -->
  <link href="static/assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
  <link href="static/assets/vendor/venobox/venobox.css" rel="stylesheet">
  <link href="static/assets/vendor/font-awesome/css/font-awesome.min.css" rel="stylesheet">
  <link href="static/assets/vendor/owl.carousel/assets/owl.carousel.min.css" rel="stylesheet">
  <link href="static/assets/vendor/aos/aos.css" rel="stylesheet">

  <!-- Template Main CSS File -->
  <link href="static/assets/css/style.css" rel="stylesheet">

</head>

<body>

  <!-- ===== Header ===== -->
  <header id="header">
    <div class="container">
```

```
<div id="logo" class="pull-left">

    <a href="/" class="scrollto">F.M.S</a>

</div>

<nav id="nav-menu-container">
    <ul class="nav-menu">
        <li class="{ % block home % }"
            { % endblock home % }"><a href="/">Home</a></li>

        <li><a href="/register">Farmer Register</a></li>
        <li><a href="/addfarming">Add Farming</a></li>
        <li><a href="/farmerdetails">Farmer Details</a></li>
        <li><a href="/agroproducts">Agro Products</a></li>
        <li><a href="/triggers">Records</a></li>

        { % if current_user.is_authenticated % }
        <li class="buy-tickets"><a href="">Welcome { {current_user.username} }</a></li>
        <li class="buy-tickets"><a href="/logout">Logout</a></li>
        { % else % }
        <li class="buy-tickets"><a href="/signup">Signin</a></li>

        { % endif % }
    </ul>
</nav><!-- #nav-menu-container -->
</div>

</header><!-- End Header -->

<!-- ===== Intro Section ===== -->
<section id="intro">
    <div class="intro-container" data-aos="zoom-in" data-aos-delay="100">
        <h1 class="mb-4 pb-0">SELL AGRO PRODUCTS AND BUY </span> </h1>
        <p class="mb-4 pb-0">DBMS Mini Project Using Flask & MYSQL</p>
```

```
<a href="/agroproducts" class="about-btn scrollto">AGRO PRODUCTS</a>
</div>
</section><!-- End Intro Section -->
<main id="main">

{% block body %}

{% with messages=get_flashed_messages(with_categories=true) %}
{% if messages %}
{% for category, message in messages %}

<div class="alert alert-{{ category }} alert-dismissible fade show" role="alert">
    {{ message }}

</div>

{% endfor %}
{% endif %}
{% endwith %}
{% endblock body %}

<a href="#" class="back-to-top"><i class="fa fa-angle-up"></i></a>

<!-- Vendor JS Files -->
<script src="static/assets/vendor/jquery/jquery.min.js"></script>
<script src="static/assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<script src="static/assets/vendor/jquery.easing/jquery.easing.min.js"></script>
<script src="static/assets/vendor/php-email-form/validate.js"></script>
<script src="static/assets/vendor/venobox/venobox.min.js"></script>
<script src="static/assets/vendor/owl.carousel/owl.carousel.min.js"></script>
<script src="static/assets/vendor/superfish/superfish.min.js"></script>
<script src="static/assets/vendor/hoverIntent/hoverIntent.js"></script>
<script src="static/assets/vendor/aos/aos.js"></script>
```

```
<!-- Template Main JS File -->
<script src="static/assets/js/main.js"></script>

</body>

</html>
```

Farmer.html

```
{% extends 'base.html' %}
{% block title %}
Add Farming
{% endblock title %}

{% block body %}
<h3 class="text-center bg-success text-white"><span>Add Farming</span> </h3>

{% with messages=get_flashed_messages(with_categories=true) %}
{% if messages %}
{% for category, message in messages %}

<div class="alert alert-{{ category }} alert-dismissible fade show" role="alert">
    {{ message }}

</div>

{% endfor %}
{% endif %}
{% endwith %}
<br>
<div class="container">

<div class="row">

<div class="col-md-4"></div>
<div class="col-md-4">
```

```
<form action="/addfarming" method="post">
```

```
<div class="form-group">
```

```
<label for="dept">Enter Farming Type</label>
```

```
<input type="text" class="form-control" name="farming" id="farming">
```

```
</div>
```

```
<br>
```

```
<button type="submit" class="btn btn-success btn-sm btn-block">Add Farming</button>
```

```
</form>
```

```
<br>
```

```
<br>
```

```
</div>
```

```
<div class="col-md-4"></div>
```

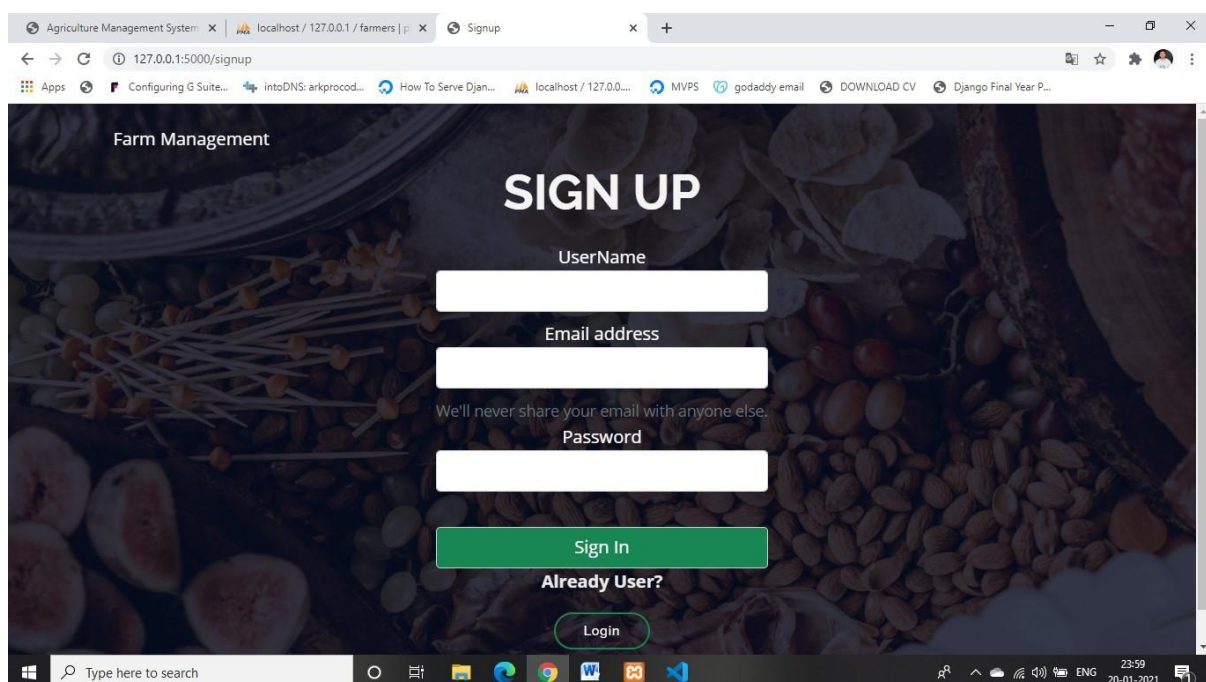
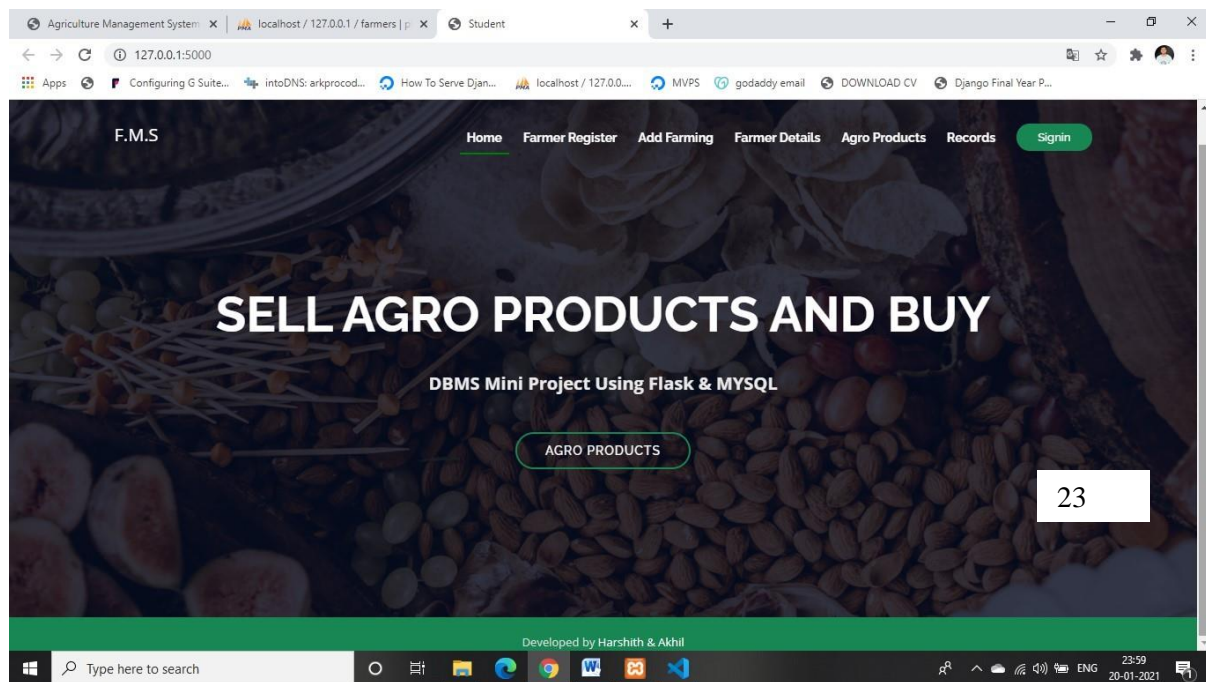
```
</div></div>
```

```
{% endblock body %}
```

USER INTERFACE

4.1 SCREEN SHOTS

SIGN IN PAGE:



Farm Management System

Agriculture Management System | localhost / 127.0.0.1 / farmers | Register Farmers Details

127.0.0.1:5000/register

Apps | Configuring G Suite... | intoDNS: arkprocod... | How To Serve Djan... | localhost / 127.0.0... | MVPS | godaddy email | DOWNLOAD CV | Django Final Year P...

F.M.S Home Farmer Register Add Farming Farmer Details Agro Products Records Welcome test Logout

Register Farmers Details

Farmer Name

Adhar Number

Age

Select Gender

Phone Number

Windows | Type here to search | 00:00 21-01-2021

REGISTRATION PAGE & PRODUCTS:

Agriculture Management System | localhost / 127.0.0.1 / farmers | Agro Products

127.0.0.1:5000/agroproducts

Apps | Configuring G Suite... | intoDNS: arkprocod... | How To Serve Djan... | localhost / 127.0.0... | MVPS | godaddy email | DOWNLOAD CV | Django Final Year P...

F.M.S Home Farmer Register Add Farming Farmer Details Agro Products Records Welcome test Logout

Agro Products

<p>GIRIJA CAULIFLOWER</p> <p>Price : 520</p> <p>Tips for Growing Cauliflower. Well drained medium loam and or sandy loam soils are suitable.</p> <p>Owner : test</p> <p>Email : test@gmail.com</p> <p>Purchase</p>	<p>COTTON</p> <p>Price : 563</p> <p>Cotton is a soft, fluffy staple fiber that grows in a boll, around the seeds of the cotton</p> <p>Owner : test</p> <p>Email : test@gmail.com</p> <p>Purchase</p>	<p>silk</p> <p>Price : 582</p> <p>silk is best business developed from cocoon for saries preparation and so on</p> <p>Owner : arkpro</p> <p>Email : arkpro@gmail.com</p> <p>Purchase</p>
---	---	---

Windows | Type here to search | 00:00 21-01-2021

Farm Management System

The screenshot shows the 'Farmers Triggers Records' page of the F.M.S. web application. The page features a dark blue header with navigation links: Home, Farmer Register, Add Farming, Farmer Details, Agro Products, Records, Welcome test, and Logout. Below the header is a large banner image of various fruits. The main content area displays a table with three columns: FARMER ID, ACTION, and TIMESTAMP. The table contains five records of farmer updates and deletions. A green 'Add Farming' button is visible in the bottom right corner of the table area.

FARMER ID	ACTION	TIMESTAMP
2	FARMER UPDATED	2021-01-19 23:04:44
2	FARMER DELETED	2021-01-19 23:04:58
8	Farmer Inserted	2021-01-19 23:16:52
8	FARMER UPDATED	2021-01-19 23:17:17
8	FARMER DELETED	2021-01-19 23:18:54

TRIGGERS RECORDS

The screenshot shows the 'Add Farming' page of the F.M.S. web application. The page features a dark blue header with navigation links: Home, Farmer Register, Add Farming, Farmer Details, Agro Products, Records, Welcome test, and Logout. Below the header is a large banner image of various fruits. The main content area displays a form with a text input field labeled 'Enter Farming Type' and a green 'Add Farming' button. A green 'Add Farming' button is also visible in the bottom right corner of the page.

Farm Management System

F.M.S

Home Farmer Register Add Farming Farmer Details Agro Products Records Welcome test Logout

Farmer Details

Your Record Has Been Saved

FARMER		PHONE				ADD AGRO PRODUCT				
RID	NAME	ADHAR NUMBER	AGE	GENDER	NUMBER	ADDRESS	FARMING	EDIT	DELETE	
9	mohit	857485748574	22	male	9986786453	banaglore	Seed Farming	Edit	Delete	ADD

ADDING AGRO PRODUCTS

F.M.S

Home Farmer Register Add Farming Farmer Details Agro Products Records Welcome test Logout

Add AgroProducts

Farmer Email

test@gmail.com

Product Name

cotton

Product Description

make silk sarees

Price

500

Add Product

DATABASE :

localhost / 127.0.0.1 / farmers /

localhost/phpmyadmin/sql.php?server=1&db=farmers&table=register&pos=0

Server: 127.0.0.1 » Database: farmers » Table: register

Showing rows 0 - 0 (1 total, Query took 0.0019 seconds.)

`SELECT * FROM `register``

Number of rows: 25 Filter rows: Search this table

rid	farmername	adharnumber	age	gender	phonenumber	address	farming
9	mohit	857485748574	22	male	9986786453	banaglore	Seed Farming

Query results operations

Print Copy to clipboard Export Display chart Create view

localhost / 127.0.0.1 / farmers /

localhost/phpmyadmin/sql.php?server=1&db=farmers&table=trig&pos=0

Server: 127.0.0.1 » Database: farmers » Table: trig

Showing rows 0 - 5 (6 total, Query took 0.0007 seconds.)

`SELECT * FROM `trig``

Number of rows: 25 Filter rows: Search this table Sort by key: None

id	fid	action	timestamp
1	2	FARMER UPDATED	2021-01-19 23:04:44
2	2	FARMER DELETED	2021-01-19 23:04:58
3	8	Farmer Inserted	2021-01-19 23:16:52
4	8	FARMER UPDATED	2021-01-19 23:17:17
5	8	FARMER DELETED	2021-01-19 23:18:54
6	9	Farmer Inserted	2021-01-21 00:01:32

Farm Management System

The screenshot shows the phpMyAdmin interface for a database named 'farmers'. The 'addagroproducts' table is selected, and the 'Browse' tab is active. The table contains 3 rows. The SQL query shown is 'SELECT * FROM `addagroproducts`'. The table structure is as follows:

	username	email	pid	productname	productdesc	price
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	test	test@gmail.com	1	GIRIJA CAULIFLOWER	Tips for Growing Cauliflower. Well drained medium...	520
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	test	test@gmail.com	2	COTTON	Cotton is a soft, fluffy staple fiber that grows i...	563
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	arkpro	arkpro@gmail.com	3	silk	silk is best business developed from coocon for sa...	582

The screenshot shows the phpMyAdmin interface for the same 'farmers' database, but the 'user' table is selected. The 'Browse' tab is active, showing 2 rows. The SQL query shown is 'SELECT * FROM `user`'. The table structure is as follows:

	id	username	email	password
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	arkpro	arkpro@gmail.com	pbkdf2:sha256:150000\$TfhDWQr\$d4c140cc6cbfcbcdcd14...
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	test	test@gmail.com	pbkdf2:sha256:150000\$RL4jFCwx\$bcfb27905ac80d431267...

CONCLUSION

FARM MANAGEMENT SYSTEM successfully implemented based on online selling which helps us in administrating the agroproducts user for managing the tasks performed in farmers. The project successfully used various functionalities of Xampp and python flask and also create the fully functional database management system for online portals.

Using MySQL as the database is highly beneficial as it is free to download, popular and can be easily customized. The data stored in the MySQL database can easily be retrieved and manipulated according to the requirements with basic knowledge of SQL.

With the theoretical inclination of our syllabus it becomes very essential to take the utmost advantage of any opportunity of gaining practical experience that comes along. The building blocks of this Major Project “Farm Management System” was one of these opportunities. It gave us the requisite practical knowledge to supplement the already taught theoretical concepts thus making us more competent as a computer engineer. The project from a personal point of view also helped us in understanding the following aspects of project development:

- The planning that goes into implementing a project.
- The importance of proper planning and an organized methodology.
- The key element of team spirit and co-ordination in a successful project.

FUTURE ENHANCEMENT

- Enhanced database storage facility
- Enhanced user friendly GUI
- more advanced results systems
- online payments

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 2. Fountas, S.; Carli, G.; Sørensen, C.; Tsiropoulos, Z.; Cavalaris, C.; Vatsanidou, A.; Liakos, B.; Canavari, M.; Wiebensohn, J.; Tisserye, B. Farm management information systems: Current situation and future perspectives. Comput. Electron. Agric
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