**HILL BLOOMS SCHOOL (Affiliated to C.B.S.E)**

**Department of Computer Science**

**Project Report**

**On**

Student Library

**Presented By:**

**VINEETH P S**

**HILL BLOOMS SCHOOL**

**MANANTHAVADY, KERALA, 670645**

****

**PROJECT REPORT**

**SUBJECT: COMPUTER SCIENCE**

Certified that this is the bonafide project report

of Mr. **VINEETH P S** of standard **XII** with Register No **24635772** for the year 2020-2021

Evaluated at Board Examination

| Examiner 1: |  | Teacher in  charge | : |  |
| --- | --- | --- | --- | --- |
| 2: |  | Signature | : |  |
|  |  |  |  |  |
| Date: |  | Principal | : |  |

**INDEX**

| **S.No.** | **File** | **Page No.** |
| --- | --- | --- |
| 1 | LibraryApp/urls.py | 01 |
| 2 | LibraryApp/views.py | 02 |
| 3 | LibraryApp/models.py | 03 |
| 4 | LibraryApp/forms.py | 05 |
| 5 | LibraryApp/Templates | 06 |
| 6 | Output | 10 |

**ACKNOWLEDGEMENT**

My first and foremost thanks is to our principal Mrs. Zita Jose for her help and co-ordination in completing this project.

I express my heartfelt gratitude to our Computer Science teacher Mr. Siby Jose, whose support and guidance paved the way for the successful completion of the project.

Let me also thank parents and friends, without whose co operation, this project would not have been so successful.

Above all I thank God Almighty for blessing me with the confidence and power to do this project.

**LibraryApp/urls.py**

from django.urls import path

from . import views

from django.conf.urls import include, url

urlpatterns = [

path('home.html', views.Home, name='Home url' ), path('booksform', views.BooksFormData,

name='bookform url'),

path('bookslist', views.booksList, name="Books List URL"),

path('files.html', views.myFiles, name='image\_files'), path('bookissue', views.bookIssue, name='Book Issue list'),

path('member', views.Library\_Member,

name='becoming member'),

path('issuelist', views.get\_issues, name='member list'), path('memberlist', views.MemberList, name='member list'),

]

**LibraryApp/views.py**

from django.shortcuts import render

from django.http import HttpResponse, HttpRequest, HttpResponseRedirect

from .models import Book, BookIssue, Lib\_Member from .forms import BookForm, IssueForm, MemberForm

def Home(request):

return render(request,'home.html')

def myFiles(request):

import os

html='''<h2>In this library,</h2>\n <ol>'''

folder = os.path.abspath (os.path.dirname(\_\_file\_\_) + '/../media/images/books')

dirlist = os.listdir (folder)

for fname in dirlist:

html += "\n <li>" + fname + "</li>"

html += "</ol>"

return HttpResponse(html)

def BooksFormData(request):

book\_id='0'

if request.method=="GET":

form = BookForm()

elif request.method == "POST": #then save the data into table

form = BookForm(request.POST, request.FILES) if form.is\_valid():

form.save()

return

HttpResponseRedirect("/library/home.html")

else: # create a new form

book\_id = request.POST['hd\_id']

if book\_id != '0':

\_data = Book.objects.get(id=book\_id)

form = BookForm(\_data)

else:

form = BookForm()

return render(request, "Booksform.html",

{"bookformdata":form, })

def booksList(request):

books=Book.objects.order\_by("booktitle")

return render(request,

"book\_table.html",{'booksdata': books,})

def bookIssue(request):

if request.method == "POST": #then save the data into table

form\_b = IssueForm(request.POST,

request.FILES)

if form\_b.is\_valid():

form\_b.save()

form\_b = IssueForm()

return render(request, "borrow.html",

{"issueformdata":form\_b, })

def get\_issues(request):

got\_issue=BookIssue.objects.order\_by('book') return render(request,

"issue\_table.html",{'issueformdata': got\_issue,})

def Library\_Member(request):

if request.method == "POST": #then save the data into table

form = MemberForm(request.POST,

request.FILES)

if form.is\_valid():

form.save()

return

HttpResponseRedirect("/library/home.html")

form\_c = MemberForm()

return render(request, "member.html",

{"memberformdata":form\_c, })

def MemberList(request):

member=Lib\_Member.objects.order\_by('id')

return render(request,

"member\_table.html",{'memberformdata': member,})

**LibraryApp/models.py**

from django.db import models

# Create your models here.

class Book(models.Model):

bookno= models.IntegerField(verbose\_name="Book Number")

booktitle=models.CharField(max\_length=255, verbose\_name="Book Title", default='Enter Book name') isbn=models.CharField(max\_length=20,

verbose\_name="ISBN")

edition=models.CharField(max\_length=20,

verbose\_name="Book Edition")

barcode=models.IntegerField(verbose\_name="Bar code")

author=models.CharField(max\_length=255,

verbose\_name="Author(s)" )

publisher=models.CharField(max\_length=255, verbose\_name="Publisher" )

price=models.IntegerField(verbose\_name="Book Price")

frontcover=models.ImageField(upload\_to='images/book s', verbose\_name="Cover Photos",

null=True)

def \_\_str\_\_(self):

return f'''{self.bookno}, {self.booktitle},

{self.author}'''

class Lib\_Member(models.Model):

name=models.CharField(max\_length=255)

std=models.IntegerField(verbose\_name='Standard',null =True)

member\_code=models.IntegerField(verbose\_name='M ember Number', null=True)

dob=models.DateField(verbose\_name='Date of birth',default='2000-01-13', blank=False)

photo=models.ImageField(upload\_to='images/members ',verbose\_name='Member photo', null=True)

def \_\_str\_\_(self):

return f'{self.name},{self.member\_code}'

class BookIssue(models.Model):

book=models.ForeignKey(Book,

verbose\_name='book', on\_delete=models.CASCADE, blank=True)

borrower=models.ForeignKey(Lib\_Member,verbose\_na me='Borrower',

on\_delete=models.CASCADE, blank=True)

issue\_date=models.DateField(verbose\_name='date of borrowal',default="2020-01-13", blank=False)

return\_date=models.DateField(verbose\_name='date of return',default="2020-01-13", blank=False)

def \_\_str\_\_(self):

return

f'{self.bookno},{self.issue\_date},{self.return\_date}'

**LibraryApp/forms.py**

from .models import Book, BookIssue, Lib\_Member from django import forms

class BookForm(forms.ModelForm):

class Meta:

model=Book

fields=('id',

'bookno','booktitle','isbn','edition','barcode','author','publisher', 'price','frontcover')

class DP(forms.DateInput):

input\_type='date'

class IssueForm(forms.ModelForm):

class Meta:

model=BookIssue

fields=('id','book','borrower','issue\_date','return\_date') widgets={'issue\_date':DP(),'return\_date':DP()}

class MemberForm(forms.ModelForm):

class Meta:

model=Lib\_Member

fields=('id','name','std','member\_code','dob','photo') widgets={'dob':DP()}

**LibraryApp/Templates**

**BookTable.html:**

<!DOCTYPE html>

<html>

<head>

<title>Books Table</title>

<style>

**.**book{

background-color:gray; border-color: purple; border-style: groove; text-align: center;align-content: center; width: 220px; height: 370px; margin-right: 5px; margin bottom: 5px;

vertical-align: middle; float:left; position:relative; top:70px; }

</style>

</head>

<body>

<div style=" border-style:solid; border-size:2px;text align:center; background-image:

url('/media/Bg/bg.jpg'); background-size:cover; height:120px; color:rgb(255,150,200); border-color:yellow; lineheight: 10px;">

{% include "menu.html"%}

<h2>Books in Library<h2/>

</div>

{% for rec in booksdata %}

<div class="book">

Book Number: {{rec.bookno}}<br />

ISBN: {{rec.isbn}} <br />

<b> {{rec.booktitle}}</b><br />

<a href="{{rec.frontcover}}"> <img

src="/media/{{rec.frontcover}}" alt="Photo" width="150" height="200" /> </a>

<br/>

Written by {{rec.author}} <br />

Published by {{rec.publisher}} <br />

Rs{{rec.price}} <br />

Barcode:{{rec.barcode}} <br />

</div>

{% endfor %}

</body>

</div>

</html>

**Borrow.html**

html>

<head>

<title>Borrow Form Template</title>

</head>

<body bgcolor="#EEDDC0">

<div style=" border-size:2px;text-align:center; background-image:url('/media.jpg'); background-size:cover; height:120px; color:rgb(255,150,200);

line-height: 10px;">

{% include "menu.html"%}

<h1 style='color:white';>Borrow Form<h1/>

</div>

<form action="/library/bookissue" method="post" enctype="multipart/form-data" >

<table align="center" bgcolor="#CACAF0">

{% csrf\_token %}

{{ issueformdata.as\_table }}

<tr> <td colspan="2" align="center">

<input type="submit" value="Submit" />

<input type="hidden" name="h\_id" value="0" id="h\_id"> </td>

</tr>

</table>

</form>

</body>

</html>

**Home.html**

<center><h1 style='color:white';>Welcome to

the</h1></center>

{%include 'menu.html'%}

**IssueTable.html**

<style>

**.issue**{

background-color:gray; border-color: purple; border-style: groove; text-align: center;align-content: center; width: 220px; height: 370px; margin-right: 5px; margin bottom: 5px;

vertical-align: middle; float:left; position:relative; top:70px; }

</style>

</head>

<body>

<div style=" border-style:solid; border-size:2px;text align:center; background-image:

url('/media/Bg/bg.jpg'); background-size:cover; height:120px; color:rgb(255,150,200); border-color:yellow; lineheight: 10px;">

{% include "menu.html"%}

<h2>Issued Book Info<h2/>

</div>

{% for rec in issueformdata %}

<div class="issue">

Book Number: {{rec.bookno}}<br />

Member issued to: {{rec.borrower}} <br /> <b> {{rec.booktitle}}</b><br />

Borrowed By: {{rec.photo}} <br />

Issued on: {{rec.issue\_date}} <br />

To be returned by: {{rec.return\_date}} <br /> </div>

{% endfor %}

</body>

</div>

</html>

**Member.html**

<html>

<head>

<title>Member Form Template</title>

</head>

<body bgcolor="#EEDDC0">

<div style=" border-size:2px;text-align:center; background-image:url('/media/Bg/bg.jpg'); background size:cover; height:120px; color:rgb(255,150,200); line-height: 10px;">

{% include "menu.html"%}

<h1 style='color:white';>Member Form<h1/> </div>

<form action="/library/member" method="post" enctype="multipart/form-data" >

<table align="center" bgcolor="#CACAF0"> {% csrf\_token %}

{{ memberformdata.as\_table }}

<tr> <td colspan="2" align="center">

<input type="submit" value="Submit" />

<input type="hidden" name="h\_id" value="0" id="h\_id"> </td>

</tr>

</table>

</form>

</body>

</html>

**MemberTable.html**

<!DOCTYPE html>

<html>

<head>

<title>Members Table</title>

<style>

**.member**{

background-color:gray; border-color: purple; border-style: groove; text-align: center;align-content: center; width: 260px; height: 370px; margin-right: 5px; margin bottom: 5px;

vertical-align: middle; float:left; position:relative; top:70px; }

</style>

</head>

<body>

<div style=" border-style:solid; border-size:2px;text align:center; background-image:

url('/media/Bg/bg.jpg'); background-size:cover; height:150px;

color:rgb(255,150,200); border-color:yellow; lineheight: 10px;">

{% include "menu.html"%}

<h1>Library Members<h1/>

</div>

{% for rec in memberformdata %}

<div class="member">

Member Name: {{rec.name}}<br />

Currently in class: {{rec.std}} <br />

<a href="{{rec.photo}}"> <img src="/media/{{rec.photo}}" alt="Photo" width="220"

height="200" /> </a>

<br/>

Born on: {{rec.dob}} <br />

</div>

{% endfor %}

</body>

</div>

</html>

**Menu.html**

<center><h1 style='color:white';>Library</h1></center> <style>

ul {

list-style-type: none; margin: 10px; padding: 10px; overflow: hidden; background-color: grey

;

}

li { float: left; }

li a {

display: block;

text-align: center; text-decoration:underline; padding: 4px 16px; text-decoration: none; }

li a**:hover**{ background-color: #01A131; }

form {

margin-top: 10px; margin-left:15%; margin-right: 15%; align-self: center;

align-items: center;

padding: 20px;

border: 1px solid #9706a4;

}

select{ min-width: 100px; }

input text{ width: 200px; border: 20px; }

body{ background-image:url(/media/Bg/library2.jfif);} </style>

<ul>

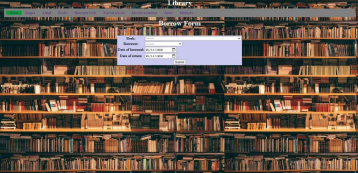
<li><a href='/library/home.html'>Home</a></li> <li><a href='/library/files.html'>Images</a></li>

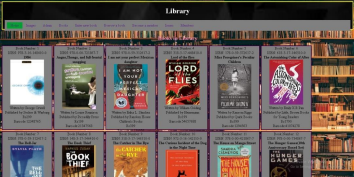
<li><a href='/admin/'>Admin</a> </li>

<li><a href='/library/bookslist'>Books</a> </li> <li><a href='/library/booksform'>Enter new book</a> </li> <li><a href='/library/bookissue'>Borrow a book</a> </li> <li><a href='/library/member'>Become a member</a> </li> <li><a href='/library/issuelist'>Issues</a> </li> <li><a href='/library/memberlist'>Members</a> </li>

</ul>

**Output**

****

****