

Project Report On

Video game rental service

Submitted by

Mukesh kumar (181IT228)

tanmaiya tentu (181IT249)

Royce Philip (181IT238)

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Under the guidance of

Dr. Anand kumar

Dept of IT, NITK Surathkal

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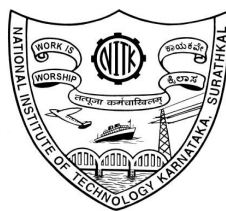
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Course Title : Object Oriented Programing

Title of the Project: Video game rental service

Details of Project Group

<i>Name of the Student</i>	<i>Register No.</i>	<i>Signature with Date</i>
1.		
2.		
3.		

Name of Project Guide:

Signature of the Project Guide:

Place:

Date:

ABSTRACT

The project is based on the Video-Game rental service interface. The mini-project is a part of evaluation within the course –plan of second-semester PSC(Programme Specific Course) and is quite significant in grading the group members for their precise and innovative applications of their coding skills in real life scenario while upholding 20% weightage in the overall evaluation. The project is not just intended for it's successful evaluation but also meant for obtaining a healthy constructive feedback about it and valuable suggestions that would help improve in the areas of project which needs to be catchy and more appealing. That's all about the idea behind the min-project.

Programming language used in our project is exclusively Java and Java-FX is used for designing the front end. Databases in the min-project are maintained using MySQL .

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INTRODUCTION

1.1 Purpose:

The purpose of the Video game rental service project is to help in management of video game service . The project provides a platform for record the purchases and handle this data . Science server is not implemented in project so backend and frontEnd both will work on the same pc.

1.2 Objective:

In this world of growing technologies everything has been computerized. So there is a need of system which can handle the data efficiently . This project can simplify the work of a person who use to rent video games.

Using this project a video game rental service can be handled easily. A already register user can sign in using his unique username and password . User can see the games available in store and send a request of purchase .he can pay for it using the QR code provided.

Admin can see the purchase requests and Accept and decline requests with a respond message as per his/her discretion.

Requirement Analysis and specifications

1)Hardware Requirements: Since our web portal is underlying on internet so there is no direct hardware interface. All the data will be saved on web database server. We will send all HTTPS requests to the website and responses will be returned from web server.

2)Software Requirements: The project is written in Java and Java-FX for graphic interfaces. Thus code would run on any operating system making it more novel and usable. Thus any operating system should have previously installed JDK -8.0 implementing the code from our project. Apart from part of the project that dominates the working principle of the project ,the part which is being worked upon are the databases associated with it which have been handled using MySQL(Structured Query Language) .

Other Requirements:

Java-MySQL connector : Used to link the instructions from the Java programme with the databases created and maintained with the help of MySQL. It helps in establishing a link between the implementing programme and query language which is the heart of the agenda of the min-project.

JDK (8.0 and above)

Not because Java is an impeccable choice of majority of programmers but it provides a vast array of choices to the users itself be it:

- 1) Reusability of functions, class, sub-classes, sub-packages without any drawbacks rendered by overloading and overriding as in case of C++ thereby making the programme more simpler and easy to handle.
- 2) More secured ways for encapsulation offered by Java.
- 3) Versatility of built-in-libraries offered by Java which reduces the burden on a programmer to rewrite code for each and every operation.

DATABASE DESIGN

3.1. ER Diagram

1.User data:

Attribute Name	Meaning	Value
id	Unique Id associated with user	Int(auto increment)
First_name	First name of user	String(25 characters)
Last_name	Last name of user	String (25 characters)
Pin_code	User address pin code	String(7 characters)
Phone no.	User mobile number	String (12 characters)
email	User email id	String(40 characters)
password	Password for user account	String(20 characters)
address	User delivery address	String(200 characters)
username	Unique username for account	String 6 characters Auto genrated

2.Game data:

Attribute Name		Meaning	Value
Game_id		Unique id of game	Int(auto_increment)
Title		Game name	String(100 char)
generation		Game generation	String(100 char)
description		Description about the game	String(2000 char)
language		Game language	String(30 char)
rating		Game rating(out of 5)	String(10 char)
Available		Available pieces	String(10 char)
rate	Rent of game		String(50 char)

3.New purchase table :

Attribute Name	Meaning	Value
id	Unique Purchase id	Int(auto assigned)
username	Username(user id who purchase the game)	String(6 char)
status	Purchase status	String(30 char)
game	Name of game purchased	String (100 char)
description	Admin response to purchase	String(100 char)

4.Admin data table

attribute	meaning	value
passwd	password	String(30 char)

Project components

Front end design : This gives way for the implementation part or the output section of our project based on the programming inputs. The application begins with opening of a window where user account and a separate admin account appears. The user will have log-in to one of the accounts otherwise sign-up with his details. After logging in the user can search for the desired game and the owners of the game would appear to whom he can pass on a request for the purchase. The admin who owns the game would receive a request and login into his/her account and then in a separate window the admin will be given a choice to accept and decline request. If the request is approved then the admin send a QR-code(via Paytm or G-pay) to the user and ask him to scan it for payment.

- Upon payment the stock of that particular game available with the admin will be auto-updated otherwise remains as-it-is.
- Confirming payment will be done by the admin which would appear in the user-account description by admin – account or vice-versa. In this way the transaction is secured with an end-to-end confirmation .The owner can also update details of the stock of games he possesses at any point of time and fix price for the game at any point of time.

Results and discussions:

Options available to admin:

- 1)Enter their domain account via secured log-in procedure.
- 2)Reset their login details.
- 3)Update the stock of games available and details about the game.,
- 4)Edit the details of the games and fix their rates.
- 5)Edit the game-pin.

show user

add game

edit game

purchase request

change password

logout

EDIT GAME

Enter id of game which you want to edit

EDIT

DELETE

enter admin password

login

cancel

show user

currnt password :

add game

new password :

edit game

Re-enter new password :

purchase request

change password

logout

change

show user

add game

add game

Title

edit game

Generation

purchase request

Description

change password

language

logout

Rating

Availbale

Rate

show user

EDIT GAME

add game

Title

pubg

edit game

Generation

action

purchase request

Description

player unknown battel ground

change password

language

english

logout

Rating

4.8

Availbale

6

Rate

350

EDIT

Options available to the users :

- 1) Edit their profiles.
- 2) Details about the purchase of their games ,their status.
- 3) Enter a purchase portal where he can bookmark the games they would like to purchase. This just like a wish-list.
- 4) Browse through the games available to a specified owner and their status.
- 5) Sign-up or log-in to their accounts.

username :

password :

login

cancel

not registerd ? [signup here](#)

home

show game

purchase status

edit profile

about

logout

EDIT USER PROFILE

First name

mukesh

Last name

kumar

pin code

332312

Adress

ghana

Phone number

9610034481

Email

Mukeshsiyak002@gmailcom

password

username

0M2ENT

EDIT

show user
add game
edit game
purchase request
change password
logout

NEW PURCHASE

Game	username
	0M2ENT
	0M2ENT
	0M2ENT
	0M2ENT
	0M2ENT
	0M2ENT
	0M2ENT
	0M2ENT
hunter	MGPL1X
hunter	MGPL1X
pokemon	JJQVOB
pubg	JJQVOB
pokemon	0M2ENT

USERNAME

GAME NAME

☐ Approve
☐ Disapprove

DESCRIPTION

OK

home

Show all games

show game	ID	Title	Genre	Description	language	Rating	Availbale	
purchase status	1	pubg	action	player unknown battel ground	english	4.8	6	35
edit profile	3	hunter	jlwhd	tfr5edsfrdeswfrcdeswcfrxdsa	hindi	4.9	6	12
about	4	pokemon	role playing	To explore the pokemon world	english,chianis	5	4	19
logout	5	wrold cricket champion...	sports	to play cricket	hindhi,english	5	20	12
	6	tom and jerry	the hayes hunter mission	mnedbfjhiocejbhdxbsio;uyfgyuiopuhgfc...	urdu	4.44444	9	20

<

>

purchase game(enter id of game which you want to purchase)

purchase

conclusion

As it was a course project so we didn't get enough time to work on it like a real-life project but we have tried our best on requirement analysis and then functionality implementation and improvement.

If any further changed or requirement changes are needed then that could be easily done. Source code is very clean and auto-understandable. This system can be easily scaled to a huge database and similar purposes.