

Project Title

Computer Game Developer

Website Name

GameArena

Description

This website allows any game developers, or administrators, to upload, edit and delete their games. While uploading a game to the website, the administrator can decide upon the name of the game, its price, description, genre(s), one cover image, and multiple images of the game. A game can also have multiple genres. A Gameld is automatically generated for each game uploaded to the website. Moreover, each image also has a unique Imageld which is also automatically generated. The administrator can also choose to mark his or her game as featured which would allow the game to be seen at the top of the home page. As mentioned above, administrators also have the ability to edit or even delete any game they uploaded. While updating the information of the game, they can alter the name, description, genre(s), price, choose new images as well as a new cover image. If the administrator wants, he or she can also delete the listing. The website also makes sure that any administrator does not have access to the information of other administrators, and only the administrator who uploaded the game can update or delete it. No administrators have access to the entire database.

Users who are not administrators can also visit the website, sign up and log in to their personal accounts to buy any game that they might be interested in. A general user does not have access to the admin privileges such as uploading, editing, or deleting any game on the database. There is a cart functionality where a user can place any game to buy right away or at a later point in time. After the user has purchased a game, it goes into the user's library so that the user can always have access to the game.

Both the user's and the administrator's passwords are stored as hash values so that even in the case of a data breach, the passwords, and consequently the accounts, are safe.

Assumption: Since the website offers video games in digital format, there is no provision of increasing or decreasing the quantity of items in the cart. Furthermore, if a user buys a game, then he or she cannot buy it again.

Languages/Frameworks

1. Languages:
 - a. Python
 - b. HTML
 - c. CSS
 - d. JavaScript/JQuery
2. Framework:
 - a. Flask

Screenshots

The screenshot shows a web application interface for adding a new game. At the top, there is a navigation bar with links for 'Home', 'My Account', and 'Actions'. A search bar is located in the top right corner. The main heading is 'Add My Game', with a note below it stating 'All fields are mandatory.' The form contains several input fields: 'Name' (with the text 'My Game'), 'Price' (with a '\$' symbol and the text 'Price'), 'Description' (a large text area), 'Select genre(s)' (a dropdown menu showing 'Racing', 'Action', 'Adventure', and 'RPG'), 'Images' (a file upload button labeled 'Choose Files' and a status 'No file chosen'), and 'Cover image' (a file upload button labeled 'Choose File' and a status 'No file chosen'). There are 'Upload' buttons for both the images and the cover image. A 'Submit' button is at the bottom left of the form.

Figure 1: Add Game

The screenshot shows a web application interface for viewing all games. At the top, there is a navigation bar with links for 'Home', 'My Account', and 'Actions'. A search bar is located in the top right corner. The main heading is 'Showing all games'. On the left, there is a 'Filters' sidebar with a 'Price' slider set to 60 and 'User Ratings' options: '4 stars and up', '3 stars and up', '2 stars and up', and '1 star and up'. The main content area displays a grid of game cards. A modal dialog box is open in the center, asking 'Delete Assassin's Creed Syndicate?' and providing a warning: 'Are you sure you want to delete Assassin's Creed Syndicate? This game will still be available in the database but it will not show up in website's listings.' The dialog has 'Close' and 'Delete' buttons. The game cards visible include 'Assassin's Creed Syndicate', 'Call of Duty: Modern Warfare', and 'Contra'. Each card has 'Edit', 'View', and 'Delete' buttons. A pagination bar at the bottom shows page numbers 1 through 8, with page 1 selected.

Figure 2: Delete Game

Home

My Account

Actions

STORYS

SEARCH

Update Contra

Change only those fields that you want to update as any change will be overwritten. Furthermore, uploading new images will delete the old images.

Name	Contra	Price	\$ 60
Description	Contra is set in the distant future of the year 2633 A.D., when the evil Red Falcon Organization have set a base on the fictional Galuga archipelago near New Zealand in a plot to wipe out humanity. Two commandos, Bill Rizer and Lance Bean of the Earth Marine Corp's Contra unit, are sent to the island to destroy the enemy forces and uncover the true nature of the alien entity controlling them.		
Select genre(s)	<div>Racing Action Adventure RPG</div>		
Featured	<input type="checkbox"/>		
Images	Choose Files	No file chosen	Upload
Cover image	Choose File	No file chosen	Upload

Figure 3: Update Game

Home

My Account

Search

Search

Your library

Filters

Price

60

User Ratings


4 stars and up

3 stars and up

2 stars and up

1 star and up

ASSASSIN'S CREED IV
BLACK FLAG




Assassin's Creed Black Flag

Assassin's Creed IV Black Flag begins in 1715, when pirates establish...

See details

ASSASSIN'S CREED
BROTHERHOOD




Assassin's Creed Brotherhood

The story once again features Ezio Auditore da Firenze, now a legendar...

See details

SEGA

FORZA HORIZON 4



Forza Horizon 4

Live the Horizon Life when you play Forza Horizon 4. Experience a shar...

See details

1

Figure 4: User Library

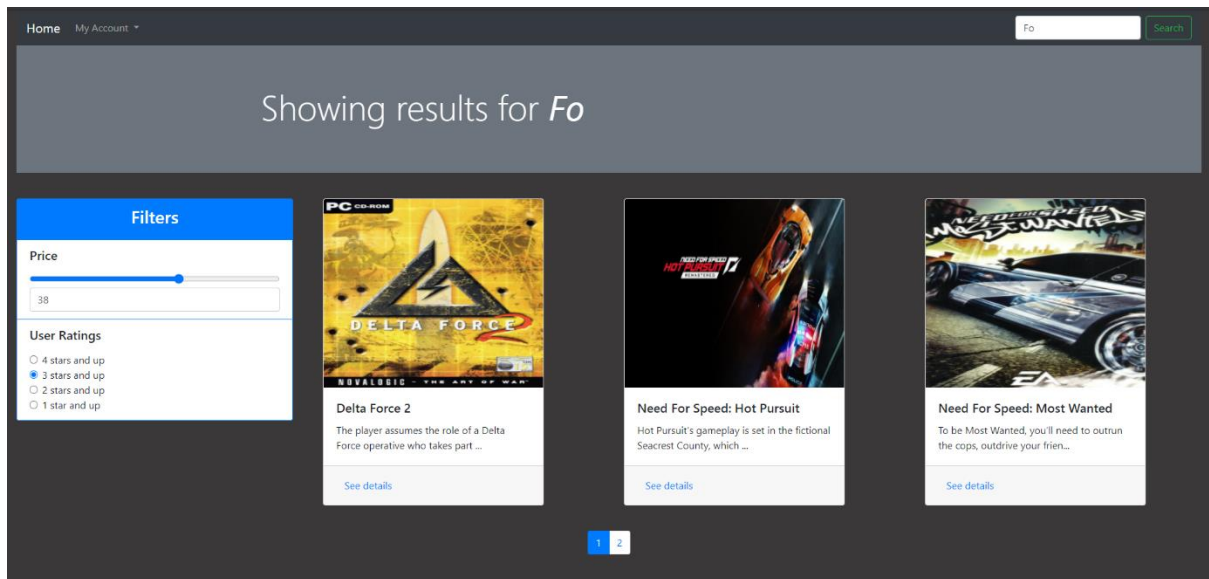


Figure 5: Search

The screenshot shows a 'Create your account' form. The form is set against a dark background with a red header bar. The header bar contains 'Home' and 'Sign up/Log in' links, and a search bar. Below the header, the title 'Create your account' is displayed in white, with a note 'All fields are mandatory.' in red. The form fields include: 'First Name' (with a red error message 'First name is invalid.'), 'Last Name' (placeholder 'Enter Last Name'), 'Email address' (placeholder 'someone@example.com'), 'Username' (placeholder 'user1'), 'Password' (placeholder '*****', with a note 'Your password must be 8-20 characters long.'), 'Confirm Password' (placeholder '*****', with a note 'Just to confirm, enter your password again. It should match the password that you entered above.'), 'Date of Birth' (placeholder 'dd-mm-yyyy' with a calendar icon), and 'Gender' (radio buttons for 'Male' and 'Female'). A blue 'Create account' button is at the bottom left.

Figure 6: Signup

Team Members

1. Ritwik Dev – rxd190028
2. Rishik Dev – rxd190027

Work Division

Ritwik Dev	Rishik Dev
Admin Index	Index
Sign Up	Sign In
Edit/Delete Existing Game	Add New Game
Game Details	Library
Search	Cart
Database	Database

Database Description

(Attached Below)

Table of contents

1 administrator	Page number: 2
2 cart	Page number: 3
3 featuredgames	Page number: 4
4 game	Page number: 5
5 gamegenre	Page number: 6
6 image	Page number: 7
7 purchased	Page number: 8
8 user	Page number: 9
9 Relational schema	Page number: 10

1 administrator

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 04:29 AM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Username	varchar(20)		No					
FirstName	varchar(20)		No					
LastName	varchar(20)		No					
Password	varchar(500)		No					

2 cart

Creation: May 09, 2021 at 02:49 PM

Last update: May 09, 2021 at 02:49 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
UserId	varchar(20)		No			-> user.Username ON UPDATE CASCADE ON DELETE CASCADE		
GameId	varchar(20)		No			-> game.GameId ON UPDATE CASCADE ON DELETE CASCADE		

3 featuredgames

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 02:50 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Gameld	varchar(20)		No			-> game.Gameld ON UPDATE CASCADE ON DELETE CASCADE		
Featured	tinyint(1)		No					

4 game

Creation: May 09, 2021 at 04:24 AM

Last update: May 09, 2021 at 03:02 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Gameld	varchar(20)		No					
GameName	varchar(50)		No					
GameDescription	varchar(500)		No					
Price	double		No					
Rating	double		Yes	NULL				
CoverImage	varchar(20)		No			-> image.Imageld ON UPDATE CASCADE ON DELETE CASCADE		
Deleted	tinyint(1)		No					

5 gamegenre

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 02:56 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Gameld	varchar(20)		No			-> game.Gameld ON UPDATE CASCADE ON DELETE CASCADE		
Genre	varchar(20)		No					

6 image

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 02:57 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
ImageId	varchar(20)		No					
ImageSrc	varchar(100)		No					
ImageAlt	varchar(50)		No					
GameId	varchar(20)		No			-> game.GameId ON UPDATE CASCADE ON DELETE CASCADE		

7 purchased

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 02:58 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
UserId	varchar(20)		No			-> user.Username ON UPDATE CASCADE ON DELETE CASCADE		
GameId	varchar(20)		No			-> game.GameId ON UPDATE CASCADE ON DELETE CASCADE		

8 user

Creation: May 08, 2021 at 06:55 PM

Last update: May 09, 2021 at 04:34 AM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Username	varchar(20)		No					
FirstName	varchar(50)		No					
LastName	varchar(50)		Yes	NULL				
PasswordHash	varchar(500)		No					
DateOfBirth	date		Yes	NULL				
EmailId	varchar(30)		No					
Gender	varchar(1)		Yes	NULL				

