

GWSHOP

A DATABASE FOR BARGAIN NOTIFICATION

Xuzheng Lu

G34363475

Contents

01 Introduction

02 Chen Notation ER Diagram

03 Crow's-Foot Notation ER Diagram

04 Applications

04 Demonstration

1 Introduction

Students of GWU who live out of the campus want to find the best bargain sales of the local stores.

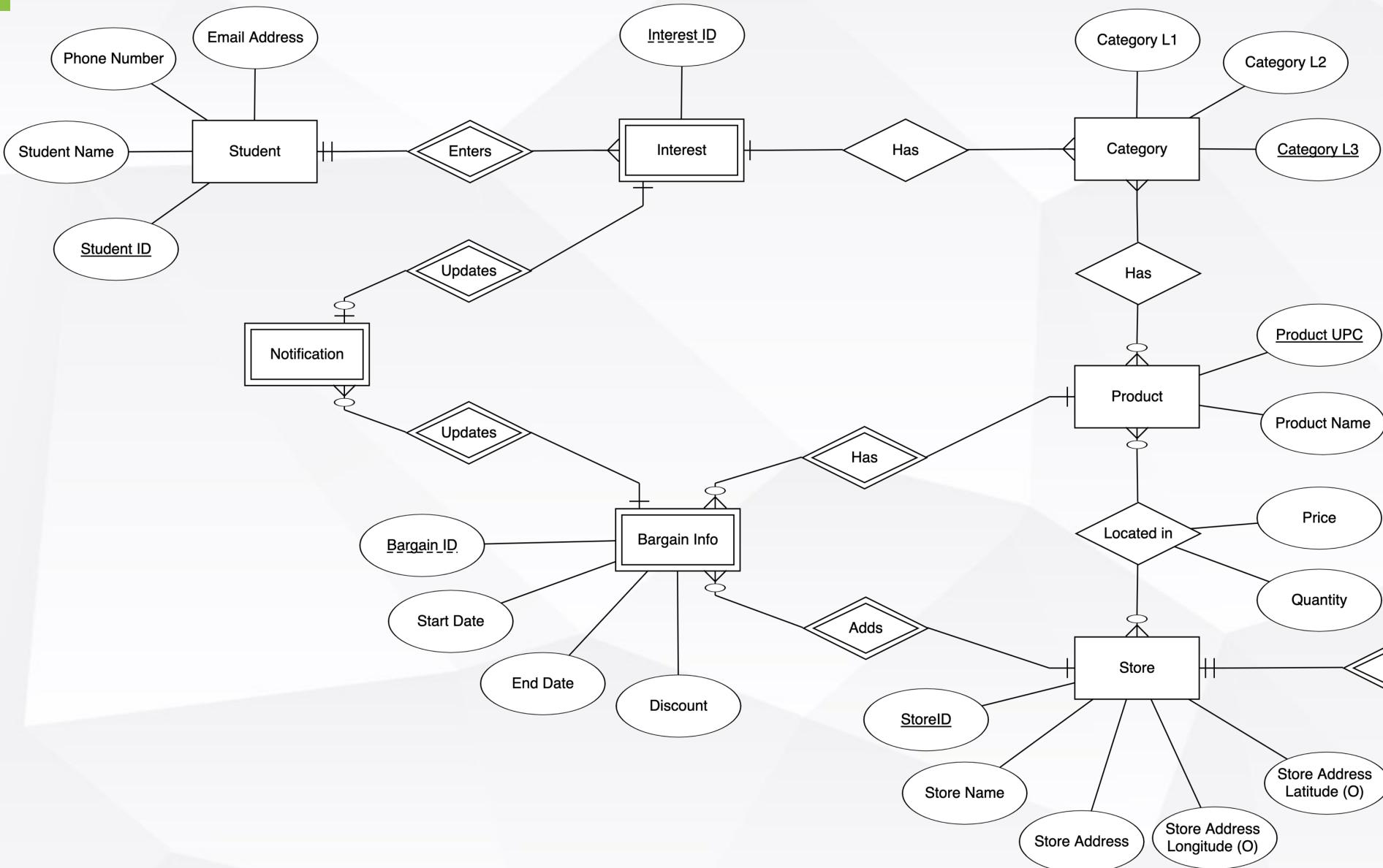
Store owners or merchants enter (or modify) their bargain listings and the information of products into GWShop. They pay \$100 a month for this purpose.

Student users enter the categories of items of their interest into GWShop, and then they can use it to find the featured bargains in the local stores.

GWShop will also send notifications (messages or emails) to matched students when a new bargain is listed.



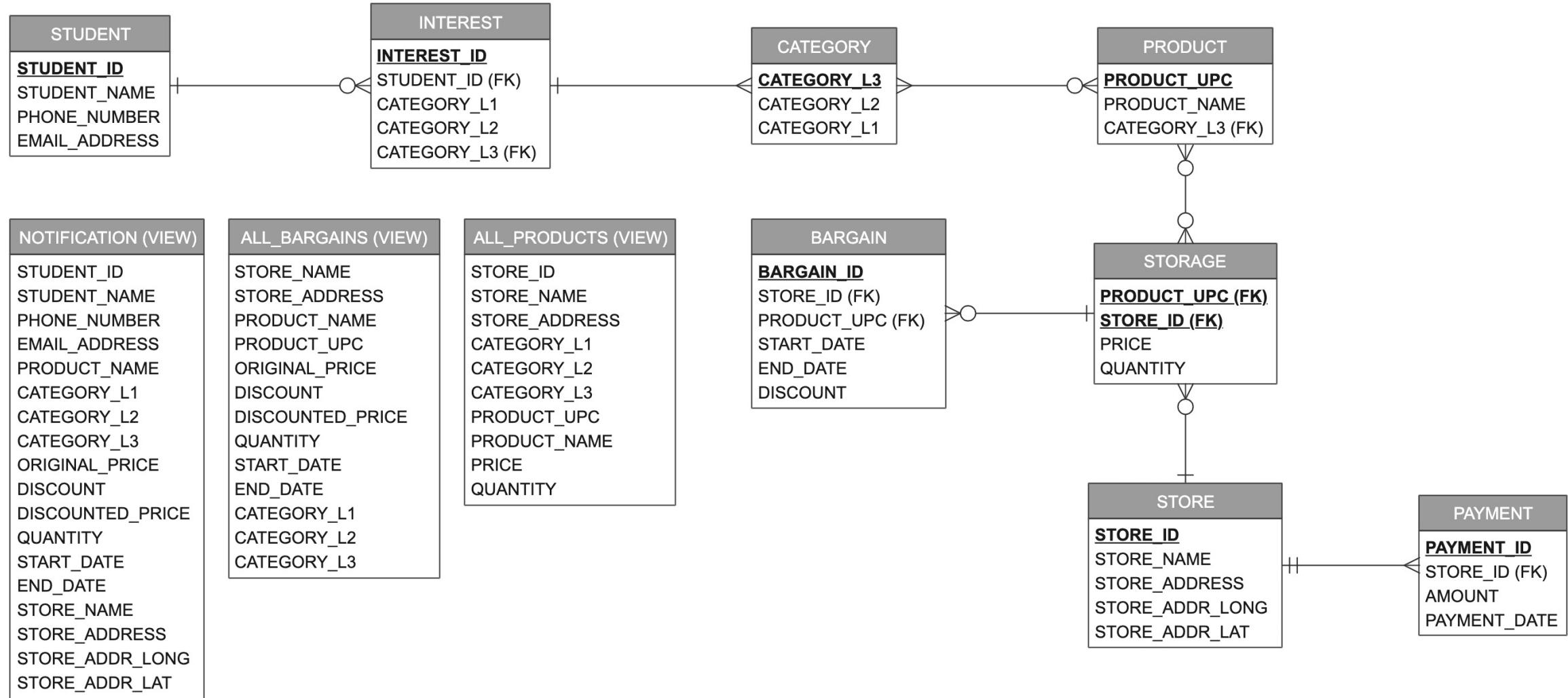
2 Chen Notation ERD



Updates:

- Added Taxonomy
- Added Payments
- Replaced Product ID by UPC
- Removed unnecessary generated keys

3 Crow's-Foot Notation ERD



4 Applications

Three Applications



GWShop
(Student
Version)
2795

GWShop (for Student User)

for students to update their wish lists and find featured bargains



GWShop (Shop
Manager
Version)
16383

GWShop (for Shop Manager)

for shop managers to update the information about products, stores, and to list bargains



GWShop
(Administrator
Version)
84170

GWShop (for App Administrator)

for the application administrator to manage the database, debug codes, review payments, and push notifications

Three User Groups

423782	423782@test.com	End User
129043	129043@test.com	End User
893021	893021@test.com	End User
284920	284920@test.com	End User
849202	849202@test.com	End User
234259	234259@test.com	End User

70289003	70289003@test.com	End User
68153627	68153627@test.com	End User
57892013	57892013@test.com	End User
49201873	49201873@test.com	End User
33092013	33092013@test.com	End User
28290173	28290173@test.com	End User
11013910	11013910@test.com	End User

ADMIN	admin@gmail.com	Workspace Administrator
-------	-----------------	-------------------------

4 Applications

GWShop (for Student User)

4 Applications

■ GWShop (for Student User) – Login & Home Page

The screenshot displays two views of the GWShop (Student Version) application. On the left is the 'Home' screen with a sidebar menu and a central content area. On the right is a 'Login & Home Page' view.

Home Screen (Left):

- Header: GWShop (Student Version)
- Navigation: Home, Find Stores, Find Products, Find Bargains, Featured Bargains, Wish List, Account, Search (234259), and a dropdown menu.
- Sidebar:

 - Home
 - Account
 - Interests
 - Featured Bargains (selected)
 - Find Stores
 - Find Products
 - Find Bargains

Login & Home Page (Right):

- Header:** GWShop (Student Version)
- Content Area:**
 - Your Student ID:** Input field containing '234259'.
 - Your Account Information:** Table showing student details:

Student Id ↑=	Student Name	Phone Number	Email Address
234259	Johnson	2024784920	johson221@gwu.edu
- Login Form (Overlaid):**
 - Icon: Rocket ship
 - Form fields:
 - Username (Student ID): 234259
 - Password: (Redacted)
 - Checkboxes:
 - Remember username
 - Buttons:
 - Sign In

Text at the bottom: The account is only permitted to visit the data owned by it.

4 Applications

■ GWShop (for Student User) – Create/Edit Account

The screenshot displays the GWShop (Student Version) application interface. The top navigation bar includes links for Home, Find Stores, Find Products, Find Bargains, Featured Bargains, Wish List, Account, and a search bar with the number 234259. The left sidebar contains links for Home, Account (with New Account), Interests, Featured Bargains, and Find Stores. The main content area shows a table of accounts with columns for Student ID, Student Name, Phone Number, and Email Address. A single account is listed: Student ID 234259, Student Name Johnson, Phone Number 2024784920, and Email Address johnson221@gwu.edu. A "Create a New Account" button is visible. Two modals are shown at the bottom: one for "Edit the Account" with fields for Student ID (234259), Student Name (Johnson), Phone Number (2024784920), and Email Address (johnson221@gwu.edu), and another for "Create an Account" with empty fields for Student ID, Student Name, Phone Number, and Email Address, along with a "Create a New Account" button.

	Student ID	Student Name	Phone Number	Email Address
	234259	Johnson	2024784920	johnson221@gwu.edu

1 - 1

Create/Change Account

Student ID
234259

Student Name
Johnson

Phone Number
2024784920

Email Address
johnson221@gwu.edu

Create/Change Account

Student ID

Student Name

Phone Number

Email Address

Edit the Account

Create an Account

4 Applications

■ GWShop (for Student User) – Add/Edit Student Interests

The screenshot shows the GWShop (Student Version) application interface. The left sidebar contains navigation links: Home, Account, Interests (selected), New Interest, Featured Bargains, Find Stores, Find Products, and Find Bargains. The main content area displays a grid of student interests categorized into three levels:

	Category Level 1	Category Level 2	Category Level 3
		Shoes	
	Electronics		
			Magic Books
			Sci-Fi Books
		Mobile Phones	

A modal window titled "Create/Change Interest" is open, showing the "Student ID" field with "234259" and a dropdown menu listing "Books", "Electronics", "Fashion", and "Foods". The "Books" option is selected. Below the dropdown is a "Category Level 3" input field and a "New Interest" button.

4 Applications

- **GWShop (for Student User)**
 - Review Featured Bargains

Only unexpired bargains will be shown.

GWShop (Student Version)

Home Find Stores Find Products Find Bargains Featured Bargains Wish List Account 234259 ▾

- Home
- Account
- Interests
- Featured Bargains**
- Find Stores
- Find Products
- Find Bargains

The map displays the street grid of Washington, D.C., with major streets labeled from A to Z. A callout box highlights the location of DC Custom Footwear at 1050 Connecticut Ave NW #500, Washington, DC 20036. Other nearby locations like Foggy Bottom, Dupont Circle, and Chinatown are also visible. A scale bar indicates 300 m.

DC Custom Footwear
1050 Connecticut Ave NW #500,
Washington, DC 20036

© OpenMapTiles © OpenStreetMap contributors

Featured Bargains

Store Name	Product Name	Original Price	Discount	Discounted Price	Quantity	Start Date	End Date	Store Address
DC Custom Footwear	Nike Womens Quest 2 Casual Running Shoe	89	.25	66.75	32	6/27/2021	6/28/2021	1050 Connecticut Ave NW #500, Washington, DC 20036
DC Custom Footwear	Adidas Originals Mens Stan Smith Leather Sneaker	32	.05	30.4	21	8/5/2021	9/30/2021	1050 Connecticut Ave NW #500, Washington, DC 20036

4 Applications

- **GWShop (for Student User)**
 - Find Stores in a Map

GWShop (Student Version)

Home Find Stores Find Products Find Bargains Featured Bargains Wish List Account 234259 ▾

Home Account Interests Featured Bargains Find Stores Find Products Find Bargains

Search... Go

Reset + - ↑ ↓ ⌂

CVS Pharmacy
2125 E St NW, Washington, DC

500 m © OpenMapTiles © OpenStreetMap contributors

Stores

Store ID ↑=	Store Name	Store Address
11013910	Dunkin' Donuts	1210 G St. NW, Washington, DC
28290173	Walmart	99 H St NW, Washington, DC 20001
33092013	CVS Pharmacy	1901 Pennsylvania Avenue NW, Washington, DC 20006
49201873	CVS Pharmacy	2125 E St NW, Washington, DC
57892013	GW Campus Store	800 21st St NW, Washington, DC
68153627	DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036
70289003	CVS Pharmacy	1201 S Hayes St Suite C, Arlington, VA 22202

4 Applications

■ GWShop (for Student User) – Search/Find Products

The screenshot shows the GWShop (Student Version) application interface. The left sidebar contains navigation links: Home, Account, Interests, Featured Bargains, Find Stores, Find Products, and Find Bargains. The main content area has a header "Search Products" and a search bar containing "Computers". Below the search bar is a table displaying product results.

Store Name	Store Address	Universal Product Code	Product Name	Price	Quantity	Category Level 1	Category Level 2	Category Level 3
GW Campus Store	800 21st St NW, Washington, DC	40568002	MacBook Pro 13 inch 2020	1299	5	Electronics	Computers & Accessories	Apple Computers
Walmart	99 H St NW, Washington, DC 20001	40568002	MacBook Pro 13 inch 2020	1299	22	Electronics	Computers & Accessories	Apple Computers
Walmart	99 H St NW, Washington, DC 20001	73823912	HP 2020 Premium 15.6" FHD	729	32	Electronics	Computers & Accessories	HP Computers
Walmart	99 H St NW, Washington, DC 20001	82013920	ASUS VivoBook 17 17.3" FHD	653.9	4	Electronics	Computers & Accessories	ASUS Computers

4 Applications

■ GWShop (for Student User) – Search/Find Available Bargains

GWShop (Student Version)

- Home
- Account >
- Interests >
- Featured Bargains
- Find Stores
- Find Products
- Find Bargains

Search Bargains

Go

Store Name ↑↓	Store Address	Universal Product Code	Product Name	Original Price	Discount	Discounted Price	Quantity	Start Date	End Date	Category Level 1	Category Level 2	Category Level 3
DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	33527292	Adidas Originals Mens Stan Smith Leather Sneaker	32	.05	30.4	21	8/5/2021	9/30/2021	Fashion	Shoes	Adidas Man Shoes
DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	77839201	Nike Womens Quest 2 Casual Running Shoe	89	.25	66.75	32	6/27/2021	6/28/2021	Fashion	Shoes	Nike Women Shoes
DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	77829012	Adidas Women's Cloudfoam Pure Running Shoe	46.7	.3	32.69	17	6/17/2021	6/18/2021	Fashion	Shoes	Adidas Women Shoes
DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	73829403	Adidas Alliance II Sackpack	17.22	.12	15.15	8	5/21/2021	6/7/2021	Fashion	Bags	Adidas Bags

4 Applications

GWShop (for Shop Manager)

4 Applications

■ GWShop (for Shop Manager) – Login & Home Page

The screenshot displays two views of the GWShop (Shop Manager Version) application. On the left is the 'Home' page, featuring a sidebar with navigation links: Home, Account, Payment, Storage, Bargains, Products, Categories, Search Products, and Student Interests Statistics. The main content area shows 'Your Store ID' (28290173) and 'Your Store Information' (Store Id: 28290173, Store Name: Walmart, Store Address: 99 H St NW, Washington, DC 20001, Store Addr Lat: 38.900475, Store Addr Long: -77.011954). A 'New' button is visible in the store information section. On the right is the 'Login & Home Page', which includes a login form with fields for 'Username (Store ID)' (28290173), 'Password' (redacted), and a 'Remember username' checkbox. Below the login form is a large blue 'Sign In' button.

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

Home Account Payment Storage Bargains Products Categories Search Products Student Interests Statistics

GWShop (Shop Manager Version)
An application for shop managers to update the information about products, stores, and bargains.

Your Store ID

28290173

Your Store Information

New

Store Id ↑↓	Store Name	Store Address	Store Addr Lat	Store Addr Long
28290173	Walmart	99 H St NW, Washington, DC 20001	38.900475	-77.011954

1 - 1

GWShop (Shop Manager Version)

Username (Store ID)
28290173

Password
.....

Remember username

Sign In

The account is only permitted to visit the data owned by it.

4 Applications

- **GWShop (for Shop Manager)**
– Create/Edit Account

Create/Change Account

Store ID

Store Name

Store Address

Store Address Latitude

Store Address Longitude

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

Actions ▾

Create a New Account

	Store Id	Store Name	Store Address	Store Addr Lat	Store Addr Long
	28290173	Walmart	99 H St NW, Washington, DC 20001	38.900475	-77.011954

1 - 1

The map displays the Washington D.C. area with major landmarks labeled: WOODLEY PARK, GLOVER PARK, DUPONT CIRCLE, GEORGETOWN, FOGGY BOTTOM, CHINATOWN, PENN QUARTER, TRINIDAD, COLONIAL VILLAGE, and RADNOR HEIGHTS. A blue marker indicates the store's location near Chinatown. A scale bar shows 1 km.

© OpenMapTiles © OpenStreetMap contributors

4 Applications

■ GWShop (for Shop Manager) – Make Payments

The screenshot shows the GWShop (Shop Manager Version) application interface. The left sidebar contains navigation links: Home, Account, Payment (selected), New Payment, Storage, Bargains, Products, Categories, Search Products, and Student Interests Statistics. The main content area has a header with Home, Interests, Search Products, Categories, Products, Bargains, Storage, Payment, Account, and a user ID 28290173. Below the header is a "New Payment" button. The "Payment History" section displays a table of payments:

Payment Id ↑=	Store Id	Amount	Payment Date
1	28290173	100	5/1/2021
2	28290173	100	4/1/2021
21	28290173	100	3/2/2021
47	28290173	100	2/4/2021
61	28290173	100	1/1/2021

A page number 1 - 5 is at the bottom of the history table. To the right, a "New Payment" modal is open, showing fields for Store ID (28290173), Amount (100), and Payment Date (with a calendar icon). Buttons for Cancel and New Payment are at the bottom of the modal.

Payment History cannot be modified by a store account.

4 Applications

■ GWShop (for Shop Manager) – Add/Edit Storage Information

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

Home Account Payment Storage New Storage Edit Storage Bargains Products Categories Search Products Student Interests Statistics

	Product UPC	Store ID	Price	Quantity
Edit	72819382	28290173	12.8	23
Edit	89237281	28290173	3.5	23
Edit	33527292	28290173	33	32
Edit	10010134	28290173	25	12
Edit	28917362	28290173	799.5	112
Edit	82013920	28290173	653.9	4
Edit	92346281	28290173	17.5	21
Edit	83712992	28290173	129.9	13
Edit	73823912	28290173	729	32
Edit	27382111	28290173		
Edit	98621728	28290173		
Edit	77839201	28290173		
Edit	40568002	28290173		
Edit	77829012	28290173		

Add New Storage

Create/Change Storage

Product UPC
33527292

Store ID
28290173

Price
33

Quantity
32

Cancel Delete Apply Changes

4 Applications

■ GWShop (for Shop Manager) – List/Delist/Edit Bargains

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

Home Account Payment Storage Bargains New Bargain Edit Bargains Products Categories Search Products Student Interests Statistics

	Bargain Id	Product UPC	Store ID	Start Date	End Date	Discount
Edit	10	82013920	28290173	5/18/2021	7/5/2021	.1
Edit	11	92346281	28290173	8/1/2021	9/2/2021	.2
Edit	16	98621728	28290173	5/28/2021	6/4/2021	.4
Edit	15	27382111	28290173	6/10/2021	6/13/2021	.3
Edit	1	72819382	28290173	6/2/2021	6/15/2021	.12
Edit	5	33527292	28290173			
Edit	6	10010134	28290173			
Edit	21	77829012	28290173			
Edit	18	40568002	28290173			

Create/Change Bargain

Product Upc
92346281

Store ID
28290173

Discount
.2

Start Date
8/1/2021

End Date
9/2/2021

[Cancel](#) [Delete](#) [Apply Changes](#)

4 Applications

■ GWShop (for Shop Manager) – Add/Edit Product Information

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

Home Account Payment Storage Bargains Products New Product Edit Products Categories Search Products Student Interests Statistics

Actions ▾ Edit Add New Product

	Product UPC	Product Name	Category Level 3
	28917362	Samsung S21 5G	Samsung Mobile Phones
	27382111	Apple iPhone 12 Pro Max (256GB, Silver)	Apple Mobile Phones
	89237281	Bacon Cheeseburger	Fastfoods
	72819382	Keebler Fudge Stripes Cookies	Cookies
	82013920	ASUS VivoBook 17 17.3" FHD	ASUS Computers
	92346281	The Martian: A Novel	
	10010134	Harry Potter and the Sorcerer's Stone	
	40568002	MacBook Pro 13 inch 2020	
	73823912	HP 2020 Premium 15.6"	
	83712992	Nike Mens Air Max Torch	
	98621728	Chocolate Cake 11 inches	
	33527292	Adidas Originals Mens Stan Smith	

Create/Change Product

Product UPC
82013920

Product Name
ASUS VivoBook 17 17.3" FHD

Category Level 3
ASUS Computers

Cancel Delete Apply Changes

4 Applications

■ GWShop (for Shop Manager) – Add/Edit Categories

The screenshot shows the GWShop (Shop Manager Version) application interface. The left sidebar contains navigation links: Home, Account, Payment, Storage, Bargains, Products, Categories (which is currently selected), New Category, Edit Categories, Search Products, and Student Interests Statistics. The main content area displays a grid of categories organized in three levels:

	Category Level 1	Category Level 2	Category Level 3
	Electronics	Mobile Phones	Samsung Mobile Phones
	Electronics	Computers & Accessories	Apple Computers
	Electronics	Computers & Accessories	HP Computers
	Foods	Snacks	Cookies
	Fashion	Shoes	Nike Man Shoes
	Fashion	Shoe	
	Books	Sci-F	
	Fashion	Bags	
	Electronics	Mobil	
	Foods	Meals	
	Foods	Snac	
	Fashion	Shoe	

A modal window titled "Create/Change Category" is open, showing the current category structure:

- Category Level 1: Electronics
- Category Level 2: Mobile Phones
- Category Level 3: Apple Mobile Phones

At the bottom of the modal are "Cancel", "Delete", and "Apply Changes" buttons.

4 Applications

■ GWShop (for Shop Manager) – Search Products

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

- Home
- Account >
- Payment >
- Storage >
- Bargains >
- Products >
- Categories >
- Search Products
- Student Interests Statistics

Search Products

Search...

Universal Product Code	Product Name	Price	Quantity	Category Level 1	Category Level 2	Category Level 3
10010134	Harry Potter and the Sorcerer's Stone	25	12	Books	Sci-Fi & Fantasy Books	Magic Books
27382111	Apple iPhone 12 Pro Max (256GB, Silver)	1289	32	Electronics	Mobile Phones	Apple Mobile Phones
28917362	Samsung S21 5G	799.5	112	Electronics	Mobile Phones	Samsung Mobile Phones
33527292	Adidas Originals Mens Stan Smith Leather Sneaker	33	32	Fashion	Shoes	Adidas Man Shoes
40568002	MacBook Pro 13 inch 2020	1299	22	Electronics	Computers & Accessories	Apple Computers
72819382	Keebler Fudge Stripes Cookies	12.8	23	Foods	Snacks	Cookies
73823912	HP 2020 Premium 15.6" FHD	729	32	Electronics	Computers & Accessories	HP Computers

4 Applications

- **GWShop (for Shop Manager)**
– Student Interests Statistics

The privacy of students
is protected!

GWShop (Shop Manager Version)

Home Interests Search Products Categories Products Bargains Storage Payment Account 28290173 ▾

The screenshot displays the GWShop application interface, specifically the 'Student Interests Statistics' module. The left sidebar shows navigation links: Home, Account, Payment, Storage, Bargains, Products, Categories, Search Products, and Student Interests Statistics. The main area is divided into three horizontal sections: 'Interests - Category Level 1', 'Interests - Category Level 2', and 'Interests - Category Level 3'. Each section contains a bar chart and a corresponding table.

Interests - Category Level 1

Category Level 1	Counts
Electronics	3
Books	2
Fashion	2
Foods	2

Interests - Category Level 2

Category Level 2	Counts
Computers & Accessories	3
Shoes	2
Meals	1
Mobile Phones	1
Bags	1
Snacks	1

Interests - Category Level 3

Category Level 3	Counts
Sci-Fi Books	3
Chocolates	2
Magic Books	2
Nike Man Shoes	1
Adidas Man Shoes	1
Cookies	1
HP Computers	1
Samsung Mobile Phones	1

4 Applications

GWShop (for Administrator)

4 Applications

▪ GWShop (for Administrator) – Login & Home Page

The screenshot shows the GWShop (Administrator Version) application interface. On the left is a sidebar with navigation links: Home, Store Accounts, Store Payments (highlighted with a red box), Storage, Bargains, Products, Categories, Student Accounts, Student Interests, Student Interests Statistics, and Student Notifications (highlighted with a red box). The main content area displays the title "GWShop (Administrator Version)" and a subtitle "An application for the administrator to manage the database." Below this is a list of bullet points:

- Manage the whole database (Create/Update/Drop)
- Review payments of store accounts
- Push featured bargain listing notifications to students

To the right, a separate window shows the "GWShop (Administrator Version)" login screen. It features a pink rocket icon, fields for "Username" (admin) and "Password" (redacted), a "Remember username" checkbox, and a "Sign In" button.

- Home
- Storage
- Bargains
- Stores
- Products
- Categories
- Students
- Interests
- Payments
- Notifications
- admin

GWShop (Administrator Version)
An application for the administrator to manage the database.

- Manage the whole database (Create/Update/Drop)
- Review payments of store accounts
- Push featured bargain listing notifications to students

GWShop (Administrator Version)

Username: admin

Password:

Remember username

Sign In

4 Applications

- **GWShop
(for Administrator)**
 - Review Store Account Payments

GWShop (Administrator Version)

Home Storage Bargains Stores Products Categories Students Interests Payments Notifications admin ▾

Home

Store Accounts >

Store Payments >

New Payment

Storage >

Bargains >

Products >

Categories >

Student Accounts >

Student Interests >

Student Interests Statistics

Student Notifications

Search: Go Actions ▾ New Payment

	Payment ID	Store ID	Amount	Payment Date
	45	57892013	100	5/5/2021
	46	70289003	100	5/3/2021
	22	11013910	100	5/3/2021
	1	28290173	100	5/1/2021
	43	49201873	100	5/1/2021
	28	68153627	100	5/1/2021
	23	33092013	100	5/1/2021
	24	33092013	100	4/2/2021
	41	11013910	100	4/2/2021
	26	57892013	100	4/2/2021
	2	28290173	100	4/1/2021
	29	70289003	100	4/1/2021
	44	49201873	100	4/1/2021
	42	33092013	100	3/4/2021
	30	70289003	100	3/2/2021
	21	28290173	100	3/2/2021
	27	57892013	100	3/1/2021
	47	28290173	100	2/4/2021
	25	33092013	100	2/2/2021
	61	28290173	100	1/1/2021

4 Applications

■ GWShop (for Administrator) – Push Notifications to Students

The screenshot shows the GWShop (Administrator Version) application. On the left is a sidebar with icons and labels for Home, Store Accounts, Store Payments, Storage, Bargains, Products, Categories, Student Accounts, Student Interests, Student Interests Statistics, and Student Notifications. The 'Student Notifications' item is highlighted with a blue background. The main area has a header with a search bar, a 'Go' button, and an 'Actions' dropdown. Below is a table with columns: Student Id, Student Name, Phone Number, Email Address, Store Name, Store Address, Product Name, Original Price, Discount, Discounted Price, Quantity, Start Date, and End Date. There are seven rows of data, each representing a product entry for student Alex.

Student Id	Student Name	Phone Number	Email Address	Store Name	Store Address	Product Name	Original Price	Discount	Discounted Price	Quantity	Start Date	End Date
129043	Alex	2021489981	alex@gwu.edu	Walmart	99 H St NW, Washington, DC 20001	Adidas Originals Mens Stan Smith Leather Sneaker	33	.08	30.36	32	7/21/2021	7/25/2021
129043	Alex	2021489981	alex@gwu.edu	GW Campus Store	800 21st St NW, Washington, DC	Nike Womens Quest 2 Casual Running Shoe	86	.3	60.2	21	7/17/2021	7/18/2021
129043	Alex	2021489981	alex@gwu.edu	Walmart	99 H St NW, Washington, DC 20001	Adidas Women's Cloudfoam Pure Running Shoe	44.2	.35	28.73	31	7/4/2021	7/8/2021
129043	Alex	2021489981	alex@gwu.edu	DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	Adidas Originals Mens Stan Smith Leather Sneaker	32	.05	30.4	21	8/5/2021	9/30/2021
129043	Alex	2021489981	alex@gwu.edu	Walmart	99 H St NW, Washington, DC 20001	Chocolate Cake 11 inches	10.5	.4	6.3	6	5/28/2021	6/4/2021
129043	Alex	2021489981	alex@gwu.edu	Walmart	99 H St NW, Washington, DC 20001	ASUS VivoBook 17 17.3" FHD	653.9	.1	588.51	4	5/18/2021	7/5/2021
129043	Alex	2021489981	alex@gwu.edu	DC Custom Footwear	1050 Connecticut Ave NW #500, Washington, DC 20036	Adidas Women's Cloudfoam Pure Running Shoe	46.7	.3	32.69	17	6/17/2021	6/18/2021

Use this form to send messages or emails automatically
– sending emails from APEX did not work

5 Demonstration

Quick Demo

Q&A

THANK YOU FOR LISTENING