



Design & Develop Online Application For Retail

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Research Project Contents

- Develop online web application
- Information overload issue
- Recommendation system
 - Content-Based recommendation
 - Purchase history
 - Addition
 - Rating,
 - Visiting history,
 - Keyword search method

Research Project Contents

- Develop online web application
- Information overload issue
- Recommendation system
 - Content-Based recommendation
 - Purchase history
 - Addition
 - Rating,
 - Visiting history,
 - Keyword search method
- Interactive interface.
- Visualization of order processing.
- Online payment methods.
- Orders generator.

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- Develop online web application
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 - Rating,
 - Visiting history,
 - Keyword search method
- Affect to everyone that using internet.
- Obstacle user to reach desired product.

Research Project Contents

- Develop online web application
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 - Rating,
 - Visiting history,
 - Keyword search method
- Assist user to reach product quicker.
- Increase chance of sale.
- Random items in the same category based on latest purchased product.

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 - Purchase history
 - Addition
 - Rating,
 - Visiting history,
 - Keyword search method
- Rating by other users.
- Page counter.



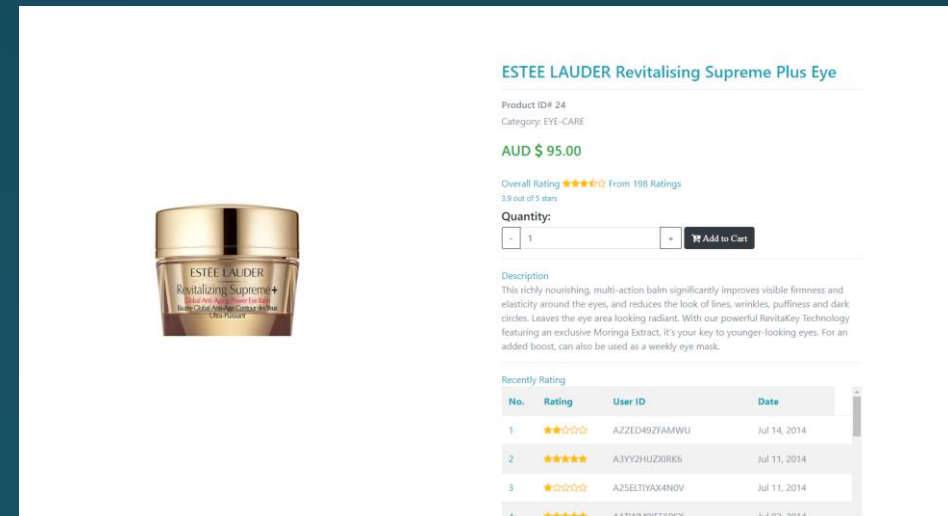
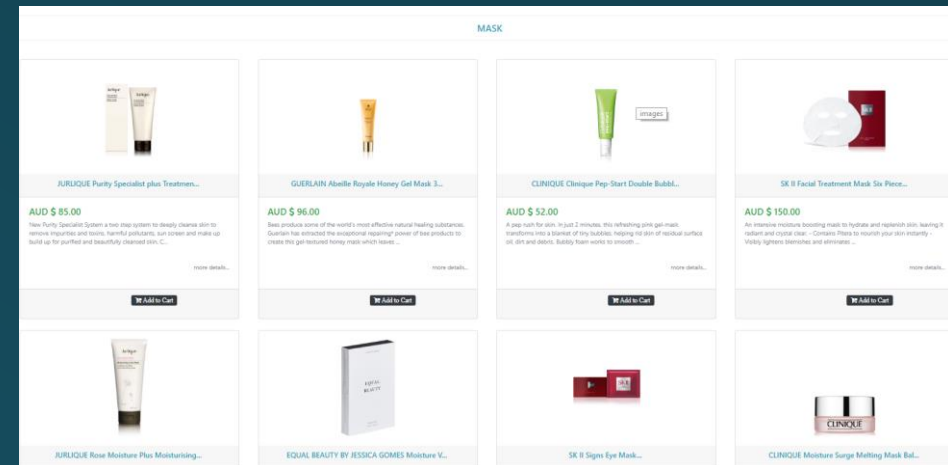
Prototype Features

- Products
- Search function
- Recommendation System
- Cart
- Checkout
- Account
- Admin zone
- Etc.

Prototype Features

Products

- Catalogues
- Product details



Prototype Features

Products

- Database
- Products
- Category

Name	Type
ProductID	varchar
ProductName	varchar
ProductDesc	text
CategoryID	int
Picture	text
Price	int







Name	Type
CategoryID	int
CategoryName	varchar
Description	varchar

Prototype Features







Recommendation System

- Purchase history
- Visiting history
- Rating

Products Recommendation

 <p>L' OCCITANE Immortelle Precious Youth... Rating ★★★★★ (776)</p> <p>AUD \$ 92.00 immortelle is a flower with exceptional longevity: it never fades, even after be... more details...</p> <p>Add to Cart</p>	 <p>SHISEIDO Srix Eye and Lip Contour... Rating ★★★★★ (764)</p> <p>AUD \$ 199.00 A truly luxurious cream for renewing skin's vitalizing forces, especially in the... more details...</p> <p>Add to Cart</p>	 <p>CLARINS Double Serum 50ml... Rating ★★★★★ (343)</p> <p>AUD \$ 135.00 The only dual-phase hydric and lipdic anti-aging treatment* rich in [2+1] plan... more details...</p> <p>Add to Cart</p>	 <p>ELIZABETH ARDEN PREVAGE Anti-Aging... Rating ★★★★★ (580)</p> <p>AUD \$ 155.00 Keeping your eyes looking youthful requires intensive, proven care. This correct... more details...</p> <p>Add to Cart</p>	 <p>GUERLAIN Abeille Royale Lifting Oil... Rating ★★★★★ (573)</p> <p>AUD \$ 140.00 Born from the exceptional repairing power of bee products, the Abeille Royale fi... more details...</p> <p>Add to Cart</p>	 <p>L' OCCITANE Divine Youth Oil... Rating ★★★★★ (434)</p> <p>AUD \$ 132.00 Divine Youth Oil helps fight visible signs of ageing for a skin texture that app... more details...</p> <p>Add to Cart</p>
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Recommended products related to items most people viewed

 <p>SK II Signs Eye Mask... AUD \$ 140.00 Rating ★★★★★ (401)</p>	 <p>JURLIQUE Rose Moisture Plus Moisturising... AUD \$ 55.00 Rating ★★★★★ (117)</p>	 <p>LA PRAIRIE Skin Caviar Eye Lift Cream 20... AUD \$ 435.00 Rating ★★★★★ (253)</p>	 <p>LA PRAIRIE Essence of Skin Caviar Eye Co... AUD \$ 205.00 Rating ★★★★★ (221)</p>	 <p>JURLIQUE Purity Specialist plus Treatment... AUD \$ 85.00 Rating ★★★★★ (232)</p>	 <p>AESOP Parsely Seed Anti-Oxidant Eye Crea... AUD \$ 91.00 Rating ★★★★★ (395)</p>
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Prototype Features

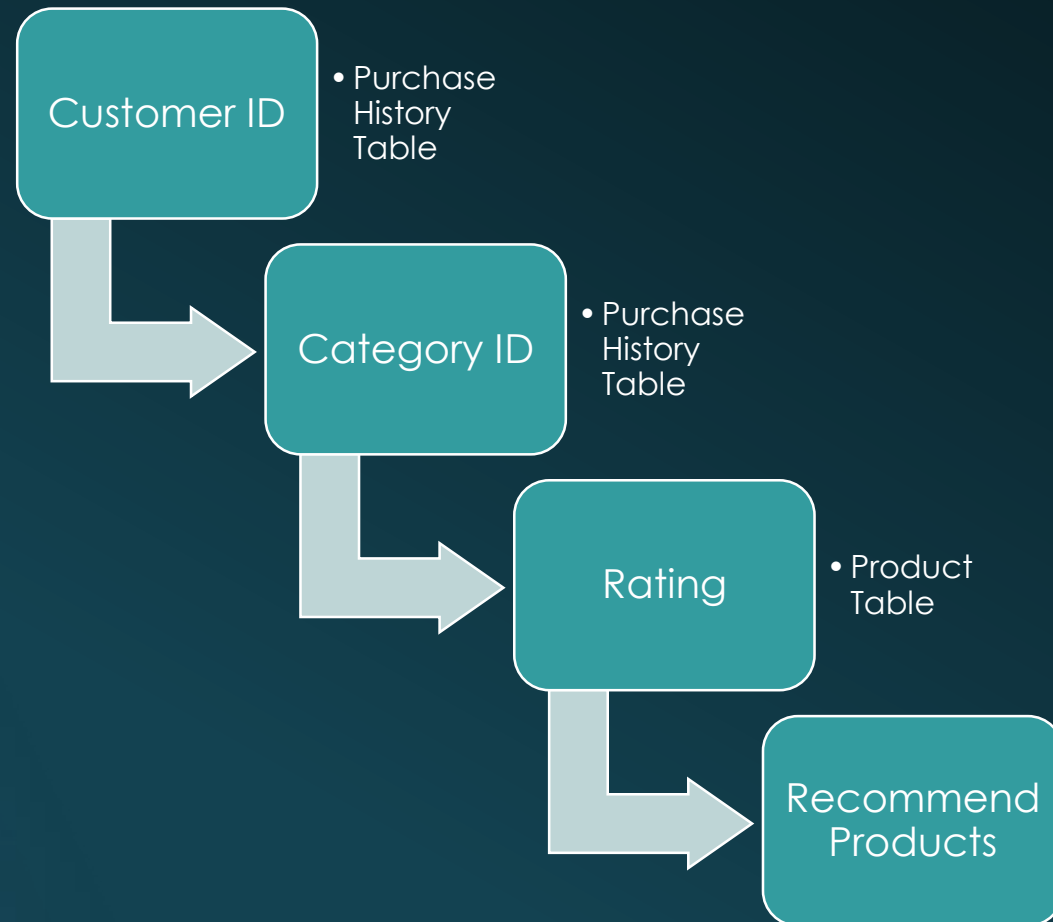
Recommendation System

- Purchase History
- Visiting History

Name	Type
OrderID	varchar
▶ CustomerID	int
OrderQTY	int
OrderTotal	float
PaymentType	int
OrderDate	datetime
ShippingFirstName	varchar
ShippingLastName	varchar
ShippingAddress1	varchar
ShippingAddress2	varchar
ShippingCity	varchar
ShippingState	varchar
ShippingPostcode	varchar
ShippingCountry	varchar
ShippingEmail	varchar
ShippingTel	varchar

Name	Type
HistoryID	int
CustomerID	int
CategoryID	int
IPAddress	varchar
▶ Visited_Times	int





Recommendation System Algorithm



Prototype Features

Cart

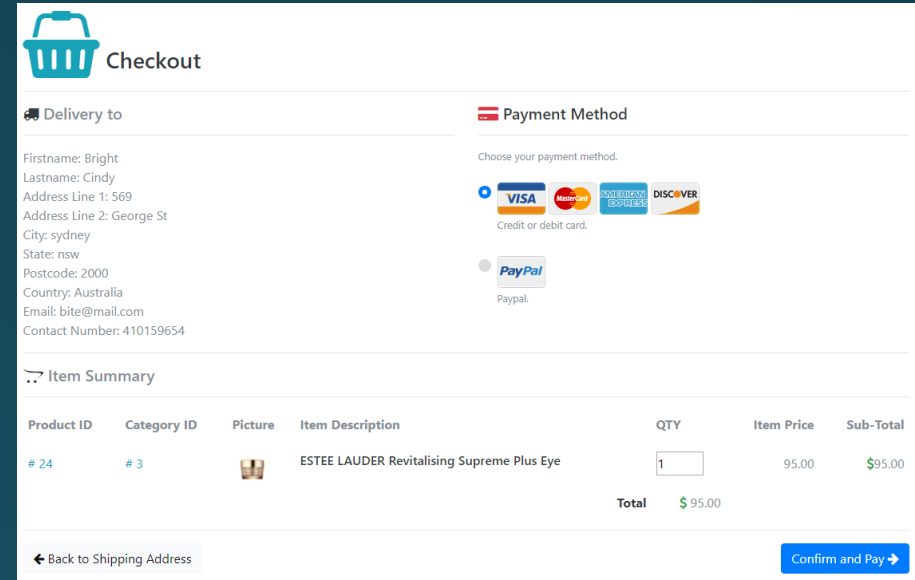
- Session

 Shopping Cart						
Product ID	Catgory ID	Picture	Item Description	QTY	Item Price	Sub-Total
# 24	# 3		ESTEE LAUDER Revitalising Supreme Plus Eye	<input type="text" value="1"/>	95.00	\$95.00 
				Update your Cart		
				Total \$ 95.00		
← Back to Shopping		Remove All Items		SignIn to Checkout 		

Prototype Features

Checkout

- Credit card payment method.
- PayPal payment method.
- Generate order detail.






Checkout

Delivery to

Firstname: Bright
Lastname: Cindy
Address Line 1: 569
Address Line 2: George St
City: sydney
State: nsw
Postcode: 2000
Country: Australia
Email: bite@mail.com
Contact Number: 410159654


Payment Method

Choose your payment method.

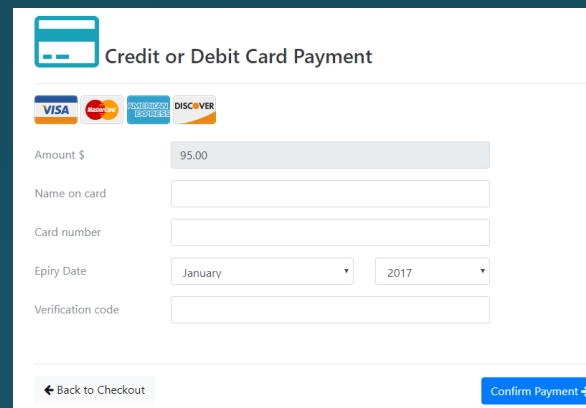
☒ **VISA**   
Credit or debit card.

☐ **PayPal**
Paypal.





Item Summary

Product ID	Category ID	Picture	Item Description	QTY	Item Price	Sub-Total
# 24	# 3		ESTEE LAUDER Revitalising Supreme Plus Eye	<input type="text" value="1"/>	95.00	\$95.00
Total					\$ 95.00	

[← Back to Shipping Address](#) [Confirm and Pay →](#)



Credit or Debit Card Payment

Amount \$

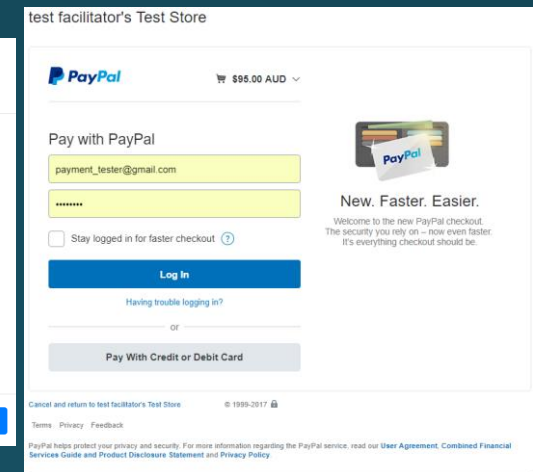
Name on card

Card number

Expiry Date

Verification code

[← Back to Checkout](#) [Confirm Payment →](#)



test facilitator's Test Store

PayPal 🛒 \$95.00 AUD

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☐ Stay logged in for faster checkout ⓘ

[Log In](#)

Having trouble logging in?

OR

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Welcome to the new PayPal checkout.
The security you rely on – now even faster.
It's everything checkout should be.

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Prototype Features

Checkout

- Credit card payment method.
- PayPal payment method.
- Generate order detail.

Name	Type
PaymentID	int
OrderID	varchar
PaymentType	int
PaymentAmount	varchar
CardName	varchar
CardNumber	varchar
CardExpire	varchar
CardVerify	int

Name	Type
OrderID	varchar
▶ CustomerID	int
OrderQTY	int
OrderTotal	float
PaymentType	int
OrderDate	datetime
ShippingFirstName	varchar
ShippingLastName	varchar
ShippingAddress1	varchar
ShippingAddress2	varchar
ShippingCity	varchar
ShippingState	varchar
ShippingPostcode	varchar
ShippingCountry	varchar
ShippingEmail	varchar
ShippingTel	varchar

Prototype Features

Account

- Register
- Sign In / Sign Out
- Account management

Create Account

First name:

Last name:

Address1:

Address Line 2:

City:

State:

Postcode:

Country:

Username:

Maximum 20 characters long.

Password:

Maximum 20 characters long.

Email:

Example@email.com
Must be available email.

Contact Number:

Contact number
eg. 0412 345 678.

[Register New Account](#)

Sign in

Username

password

[Sign In](#)

[Create your Prototype Shop account](#)

My account

Account Details

First name:
[username](#)

Last name:
[pilottheerachot](#)

Address Line 1:
[george](#)

Address Line 2:
[street](#)

City:
[Sydney](#)

State:
[NSW](#)

Postcode:
[2000](#)

Country:
[Australia](#)

Email:
[a@hotemail.com](#)

Contact Number:
[412345678](#)

Purchase history

Purchase Date	Order ID	Order quantity	Total Price	Shipping Name	Payment Method	
#2017-10-30 00:29:45	#30102017-40	1	\$175	kunanon	Credit Card	More Info Give Rating
#2017-10-30 00:28:00	#30102017-39	1	\$50	kunanon	Credit Card	More Info Give Rating

Prototype Features

Account

- Register
- Sign In / Sign Out
- Account management

Name	Type
CustomerID	int
Username	varchar
Password	varchar
CustomerFirstname	varchar
CustomerLastname	varchar
CustomerAddr1	varchar
CustomerAddr2	varchar
City	varchar
State	varchar
Postcode	varchar
Country	varchar
CustomerTel	int
Email	varchar
► PrivilegeID	int

Prototype Features

Admin zone

- Add
- Edit
- Remove
- Report

User list Dashboard

Label
Something else

Label
Something else

Label
Something else

Label
Something else

No.	Firstname	Lastname	Address1	Address2	City	State	Postcode	Country	Username	Password	Email	Contact	Privilege	
1	Cindy	Somsiri	George	Street	Sydney	NSW	2000	Australia	testdev	09f8b0c44621d373cade4e832627b4f6	kunanon.pt@gmail.com	0	1	Edit Delete
2	Bright	Cindy	569	George St	sydney	nsw	2000	Australia	test	09f8b0c44621d373cade4e832627b4f6	bite@gmail.com	410159654	2	Edit Delete
3	test	test	dev	que	Bangkok	Bangkok	12345	Thailand	dev	09f8b0c44621d373cade4e832627b4f6	dev	123	3	Edit Delete
4	a	a	a						asd	09f8b0c44621d373cade4e832627b4f6	aa	222	3	Edit Delete
5	a	a	ades						test	12	test	445	3	Edit Delete
6	dev	test	123						ok	123	99	213123123	2	Edit Delete
7	Tester	Dev	123, George Street, Sydney, Australia						usertest	dQvzsk+s	dev@gmail.com	412345678	1	Edit Delete
8	tester2	testdev	Bangkok, Thailand						developer	1234	test@hotmail.com	412456789	1	Edit Delete
9	test3	3test	Sydney, Thailand						dever	dQvzsk+s	123@gmail.com	41212121		Edit Delete
10	johny	Bravo	Sydney, AU						john	1212	john@gmail.com	411111111		Edit Delete
11	asd	asdas	doad						asdas	doad	asdasd	1213213123		Edit Delete
12	sad	asdas	doad						asd	asdas	doadsd	1213		Edit Delete

Order Report Dashboard

Overview

Reports

Analytics

Export

Nav Item

Nav Item again

One more nav

Another nav item

Nav Item again

One more nav

Another nav item

Recently Order Report

Purchase Date	Order ID	Order Total quantity	Total Price	Product ID	Product Name	Quantity	Product Price	Payment Method	Shipping First Name	Shipping Last Name	Shipping Address1	Shipping Address2	Shipping City	Shipping State	Shipping Postcode	Shipping Country	Shipping Email	Shipping Tel
#2017-10-31 18:25:44	#31102017-42	1	\$199	#25	SHISEIDO Soft Eye and Lip Contour Reg. C...	1	\$199	Credit Card	99	se	209	george st.	Sydney	Sydney	2000	Australia	dj95@hotmail.com	967654434

Orders Detail Report

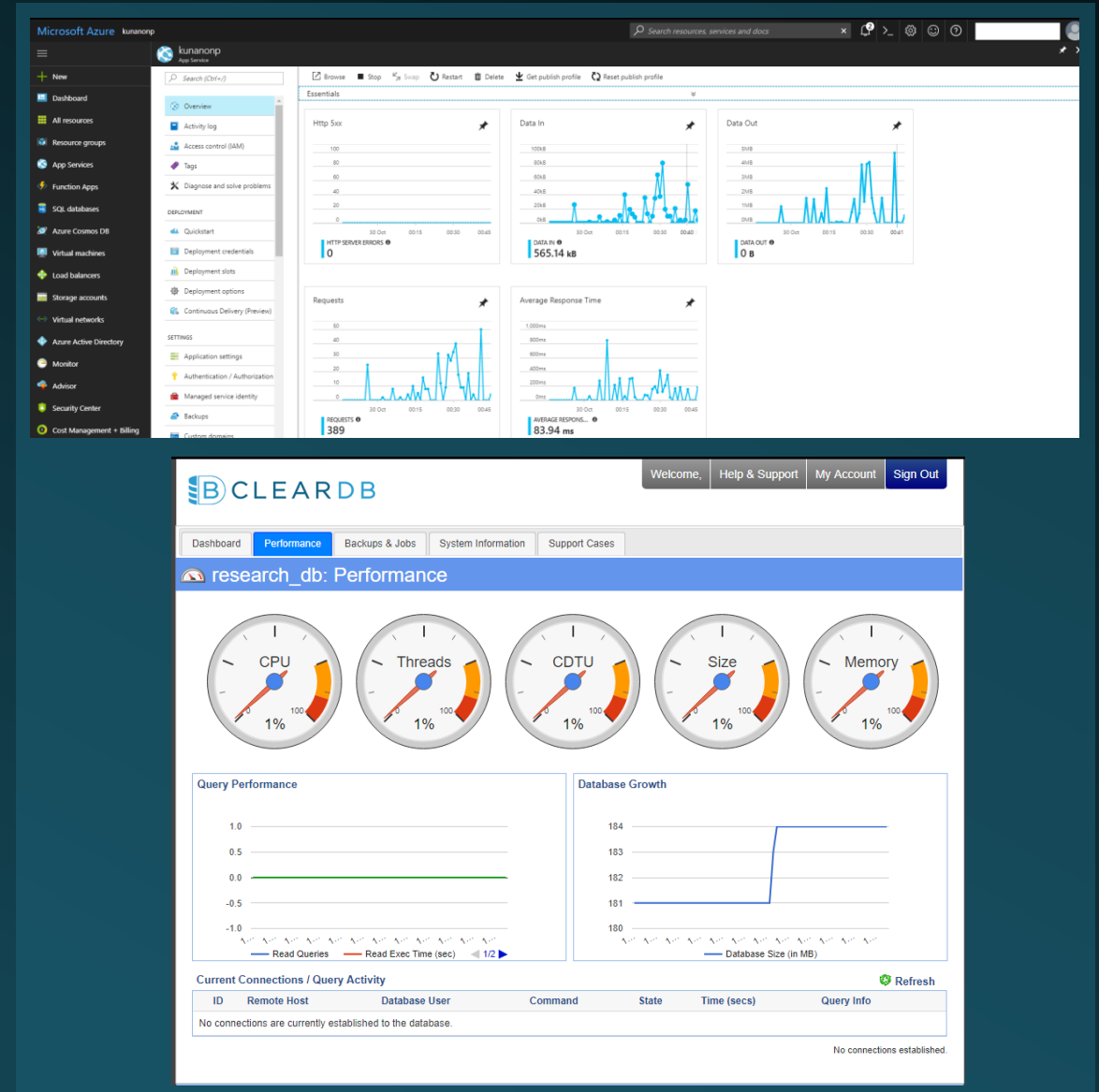
Purchase Date	Order ID	Order Total quantity	Total Price	Product ID	Product Name	Quantity	Product Price	Payment Method	Shipping First Name	Shipping Last Name	Shipping Address1	Shipping Address2	Shipping City	Shipping State	Shipping Postcode	Shipping Country	Shipping Email	Shipping Tel
#2017-10-31 18:25:44	#31102017-42	1	\$199	#25	SHISEIDO Soft Eye and Lip Contour Reg. C...	1	\$199	Credit Card	99	se	209	george st.	Sydney	Sydney	2000	Australia	dj95@hotmail.com	967654434
#2017-10-31 04:20:02	#31102017-41	1	\$660	#7	LA PRANIE White Caviar Illuminating Pear...	1	\$660	Credit Card	kunanon	pt@therachot	george	street	Sydney	NSW	2000	Australia	k@hotmail.com	4123456
#2017-10-30 00:29:45	#30102017-40	1	\$175	#3	ELGABETH ARDEN Ceramide Capsules - Repac...	1	\$175	Credit Card	kunanon	pt@therachot	george	street	Sydney	NSW	2000	Australia	k@hotmail.com	4123456
#2017-10-30 00:28:00	#30102017-39	1	\$92	#20	L OCCITANE Rosemarie Precious Youth Sero...	1	\$92	Credit Card	kunanon	pt@therachot	george	street	Sydney	NSW	2000	Australia	k@hotmail.com	4123456
#2017-10-30 00:28:00	#21102017-8	6	\$468	#100015A360	Serge Gainsbourg	1	\$14	Credit Card	Bright	Cindy	569	George St	sydney	nsw	2000	Australia	bite@gmail.com	410159654

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Prototype

- Azure cloud service
- ClearDB database
- <http://kunanonp.azurewebsites.net/>





Evaluation

- Test web application functions.
- Attempt to make a purchase.
 - With different payment method (credit card and PayPal)
- Attempt to create an account
 - Sign In
 - Sign Out
- Attempt to add, delete, update product on cart.
- Attempt to Search product.
- Check rating contents in product page.
- Check recommendation contents.
- Check admin zone outcome.

Conclusion

- Web application for retail
- Content-based recommendation
- Performance
- Future work
 - Collaborative recommendation system
 - API
 - Admin zone functions