



PROPOSAL

DQueue

*for Customers
& Merchants*

digitalizing to save your time.

● s10221992@connect.np.edu.sg

● DUX Assignment 1

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Introduction to DQueue

// 'd-kyoo' //

[digital queue]

The name of DQueue is based on the idea that it is a digital queue. It is easy to say and remember, hopefully resonating with users that this is the queue to be in.

DQueue tackles the main issue that COVID-19 has surfaced for the Food and Beverage Businesses (FnB) - how can they reach out to customers in a more digitalized manner? When dining in was finally allowed, many FnBs were struggling to cope with the high demand and limited space due to social distancing and limited group sizes.

As of today, there is no need for social distancing and group sizing. But, as we all transition to our 'New Normal' and more people start dining in, you'd be surprised of just how many restaurants still use a physical card to keep track of membership or notebooks to record reservations. With DQueue, we want to integrate the FnB world further into digitalization.

As customers post COVID, we could just be in the comfort of our homes ordering delivery instead of waiting in stuffy queues for food. However, the ambience of eating in a restaurant or café with fresh food served straight to you is unbeatable.

DQueue will allow customers to enjoy the experience of eating in whilst avoiding the unenjoyable experience of being in a physical queue. Customers can queue from the comfort of their own homes and go down when their table is ready for them. They can also reserve their table in advance on DQueue.

DQueue will also empower merchants to upgrade their businesses by being more accessible to more customers through this digital platform.

Introduction to *DQueue*

// 'd-kyoo' //
[digital queue]

Now reading: **What Can We Expect of F&B's New Normal?**

Distant dining

What about consumers who want the experience, but zero proximity?

Restaurants and bars around the world have been working on that too. In China, the hotpot chain [Haidilao](#) has retained customer loyalty with livestreams that let people share meals together online.

The local Irish pub [McGettigans](#) didn't skip a beat either. It shifted its traditional open-mic music nights to Facebook Live while increasing takeaways so customers could enjoy its favourite Irish grub and music at home.

Of course, none of the above would be possible without new technology. Whether it's data analysis, mobile-first services, AI or even robots — the emerging digital ecosystem is disrupting every industry.

And if you're in the F&B sector, you will know this better than almost anyone else.

<https://www.ocbc.com/business-banking/articles/what-can-we-expect-of-fb-new-normal>



Introduction to *DQueue*

// 'd-kyoo' //
[digital queue]

Food and Beverage Businesses have been trying to go digital to also reduce their reliance on manpower. Since the pandemic, there has been a drastic increase of FnBs but not enough manpower to meet the demand.



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Government agencies have stressed the need for the F&B sector to reduce its manpower reliance and pointed out that there is an "oversaturation" in the industry, with more and more F&B firms being set up even during the pandemic years. (Illustration: TODAY/Anam Musta'ain)

SINGAPORE: Just months before the coronavirus landed on Singapore's shores, Ms Anna Lim, the co-founder of The Soup Spoon, was already planning to pilot the use of self-ordering kiosks at selected outlets of the casual restaurant.

<https://www.channelnewsasia.com/singapore/big-read-food-beverage-manpower-woes-eateries-robots-covid-19-2630486>

DQueue

// 'd-kyoo' //
[digital queue]

Vadora & Co. was inspired to create this app to help the FnB business follow the footprints of where we are heading - Digital. Not all merchants will have the resources to digitalize and share their product with the rest of the world. We can step in and help them to share their form of art to more people and survive in this new generation of digitalization.

This solution will boost businesses that are struggling in this time and will also be another way of preventing another virus outbreak by reducing crowds and physical queues. It would be a step towards better customer experience and automation for merchants. DQueue aims to serve to be a convenience for both merchants and customers.

DQueue will provide customers with many FnB options to choose from. When they have chosen it, they can see the reviews of the place, an option to digitally queue for a table now or reserve a table for the next day or service (e.g. reserving a table for dinner at 12pm) depending on the availability of the merchant.

Even after COVID, many ways will remain even after COVID. For instance, Home Based Learning lessons have been more normalized and will continue to be a normal part of a student's schedule. In that same way, we have already moved forward towards a digitalized world that will not take a step backwards even after COVID. Hence, digitalized queues and reservations would be extremely fitting and lasting.

DQueue is catered to everyone. When anyone wants to eat out, DQueue will make the process of dining in so much more easy to enjoy a peaceful meal without worrying about peak hours or crowded queues.



Introduction to *DQueue*

// 'd-kyoo' //
[digital queue]

An example of how Digital Queues can be greatly appreciated and useful for an FnB - *McDonald's Mobile Order*.

More than just an ordinary food delivery app, My McDonald's lets you skip the queue, find a table at the McDonald's restaurant you are visiting, order at your leisure, and then sit back as your order is sent to your table when you arrive.

If you feel like avoiding the dine-in crowd, make your order online and have it ready and waiting for you at the pick-up counter or Drive-Thru.

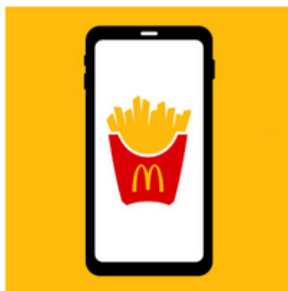
<https://sethlu.com/mcdonalds-mobile-order-singapore-apr-2022/>

The last thing you want when you're famished is to have to queue for your food. McDonald's Singapore has just introduced a new way you can beat the queue and place your order with just a few taps and swipes.

You can now use McDonald's Mobile Order, available on the My McDonald's app, when you're dining in or taking away.

<https://cnalifestyle.channelnewsasia.com/dining/mcdonalds-singapore-mobile-order-app-dining-takeaway-drive-thru-309806>

Three Easy Steps to Order Take-Out in the McDonald's App



Order On Your Time

Use our app to pick out your favorite McDonald's items a la carte or make a meal. Or choose from exclusive deals using the "Add Deal to Mobile Order" button.



Pay

Make your contactless payment using any major credit card. Your card will not be charged until you check in. You can add or remove a payment card using the Checkout and My Account screens.



Pick Up On Your Terms

Check in at any participating McDonald's restaurant to pick up your meal—get your food brought to you curbside, or grab it in the Drive Thru.

Mobile Order & Pay at participating McDonald's. McD App download and registration required.

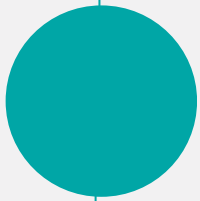
<https://www.mcdonalds.com/us/en-us/mobile-order-and-pay.html>

Features on *Mobile* –



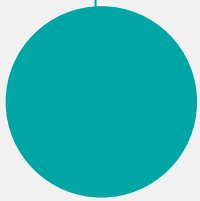
Search by *name*

Users can search whatever place they want to go to easily by just typing the name.



Reviews

Users can drop a review on the FnB outlet as well as view the merchants past reviews from people who have been there to get a better understanding before choosing to eat there.



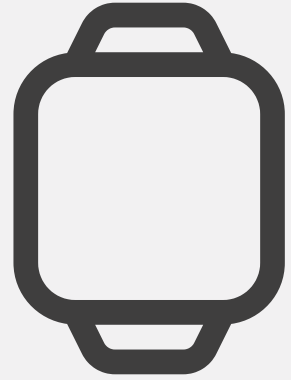
Join the queue, digitally.

From DQueue, users can start queuing from their phones, digitally.

Features on *Watch* -



Vadora & Co.



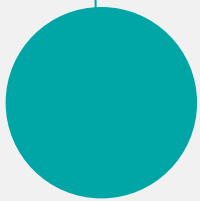
Search by *feature*

If users want to look for a specific chain, they will have to search by categories because the watch's interface is too small to have a keyboard typing out the name.



Horizontal Scrolling

Along with Vertical Scrolling, users also can scroll horizontally to view more using the small interface.



Join the queue, digitally.

From DQueue, users can start queuing from their phones, digitally. Despite the watch's smaller interface, this can still be performed by buttons.

Competitive Analysis



WaveTec

Wavetec They provide a state-of-the-art Enterprise Virtual Queue Management Systems (QMS) & take a number solutions with current design and a customizable and standard, enterprise level information system to map customers' journey and enhance customer experiences.

Their customers have seen:

35%

Reduction in
customer
waiting times

30%

Reduction in
operational
cost

15%

Increase in
self service
transactions

23%

Increase in
customer
satisfaction

They work with brands such as:



SAMSUNG



Vadora & Co.

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Competitive Analysis



McDonalds

The McDonalds app allows users to order in advance and picked up when the order is ready. Users can order on their phones at home from branch A and go down once the order is being prepared. When the user reaches, they can just pick up their order - skipping the queue.

Includes features like:

- Identifying McDonald branches near the user
- Redeeming the McDonald deals through the mobile order
- Being able to earn points for rewards through mobile order
- Allowing users flexibility whenever they want to pick up their mobile order.

Three Easy Steps to Order Take-Out in the McDonald's App



Order On Your Time

Use our app to pick out your favorite McDonald's items a la carte or make a meal. Or choose from exclusive deals using the "Add Deal to Mobile Order" button.



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Competitive Analysis



Queue-It

Queue-It controls online traffic with a virtual waiting room to deliver a superior user experience free from website crashes and bots. This helps to control the website traffic by making users queue digitally to access it. This ensures a seamless experience for users without crashes or bugs due to high traffic.

Customers use Queue-It for:



In-demand online ticket sales



Product launches & releases



Government applications



Shopping holidays like Black Friday



Seamless user experience

Protect your reputation and create a seamless, branded experience for high-demand sales. Put visitors in a fair first-in, first-out line, harness queue psychology, and tap into social proof.



Admin control & analytics

Control is at your fingertips with GO Queue-it, our web-based admin platform. Configure waiting room settings, monitor real-time traffic, and get data-driven insights into future sales.



Bot & abuse protection

Serve your genuine customers, not bots. Validate visitors using reCAPTCHA or Queue-it's innovative Proof-of-Work challenge and verify that visitors have come from the queue.

Competitive Analysis



DQueue

DQueue provides an enhanced experience of eating out without the crowds or worry for peak hour. If a user wants to eat at place A for dinner, they simply have to go on the app and join the digital queue and wait for a table to be ready for them. Or, book a reservation during lunchtime.

Analysis:

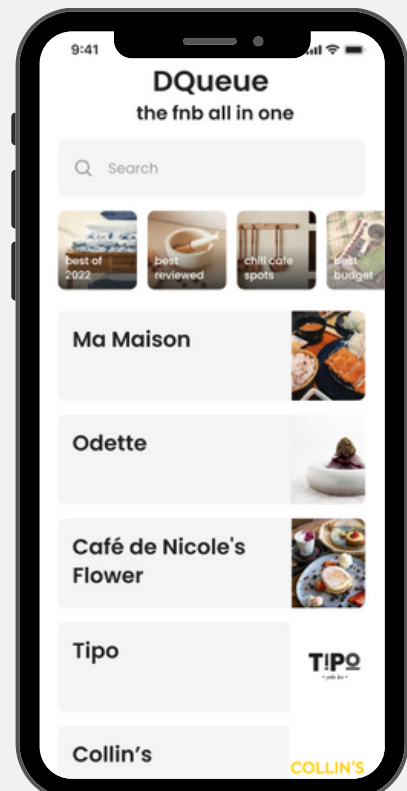
- There are no virtual queues for the Food and Beverage Businesses - other than McDonalds.
- Most include waiting rooms to be the digital queuing system

DQueue would be a service to:

- All FnB merchants
- Anyone who wants to eat out

DQueue would have features such as:

- Users being able to book a reservation through the app instead of having to call the restaurant
- Users being offered timings that are available to merchants instead of users choosing timings that aren't available to merchants
- Being able to queue anywhere from the phone



Competitive Analysis



	Customers	Features
WaveTec	Mainly big global companies - not FnB	A system which is customizable to fit customers needs
McDonalds	McDonald users who want to order McDonalds	To be able to find a branch nearest to the user
Queue-It	E-Commerce and Ticketing Businesses	Using a virtual waiting room to control website traffic
DQueue	Food and Beverage Businesses and consumers	Food and Beverage Businesses and consumers

User Perspectives



Core Objective 1:

A user wants to join the dine-in queue at a popular Food & Beverage outlet digitally so that he can receive notifications when it is his turn instead of having to join the physical queue.



Core Objective 2:

A user wants to reserve a table for dinner the next day and chooses to do so by DQueue instead of having to call up the outlet and check when their availabilities meet. The user can compare from the availabilities stated on the app and their own calendar.

Persona -

Name: Karen Tan

Age: 41

Occupation: Marketing Head

Status: In a relationship

Location: Singapore

Extroverted  20%

Intuitive  60%

Feeling  80%

Prospective  59%



Goals -

- To eat out whenever and wherever without queuing
- To book a reservation without calling the outlet

Frustrations -

- Digital queuing still takes up some time
- Outlet availabilities do not suit her availabilities

BIOGRAPHY -

Karen is a mother of two teenagers and is working as a Marketing Executive for a global company. She is willing to pay for food, as long as the quality is guaranteed. However, she will seek to avoid any form of human interaction. She's there with one objective - to eat. Delivery isn't really a good option as the food gets cold by the time it gets to her.

Brands -



SAMSUNG



foodpanda



EVERLAST
GYMS



NESPRESSO

Say and Do

- Is open to digital queues
- Often goes out with friends by catching a meal out
- Have a common fear of being in a crowd
- They usually go out when they want to catch up after a long time

Hear

- COVID is very concerning and avoiding a crowd would be most ideal
- Her colleagues are mostly foreigners on work pass
- She is very appreciated at work

Tasks

- To book a reservation or join a queue to a restaurant virtually.



Karen



Empathy Map

Overall Goal

To be able to book a reservation / join a queue virtually to avoid unpleasant situations.

Feelings

If I can have a pleasant meal without tedious queueing and limited human interaction, I'll take it.

Pain Points

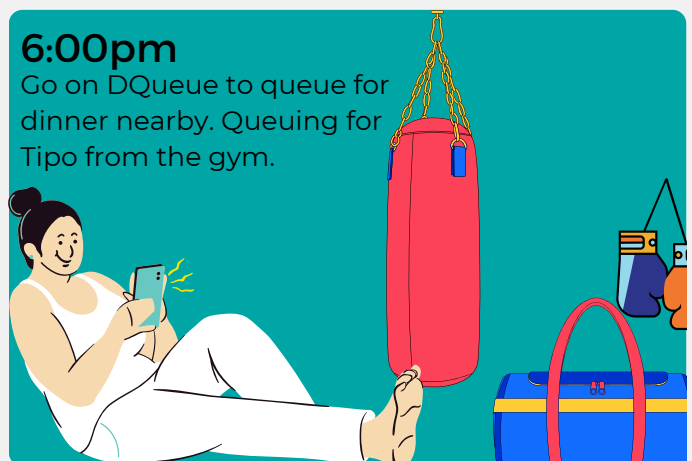
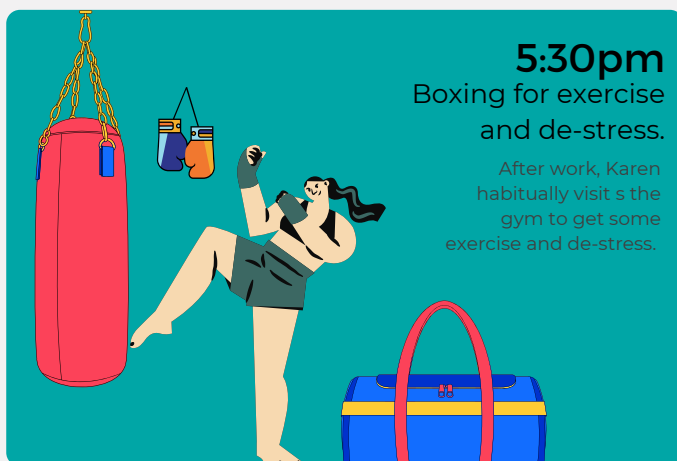
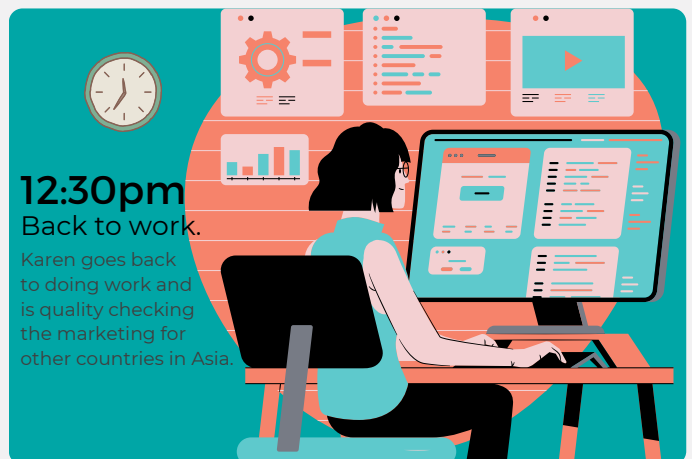
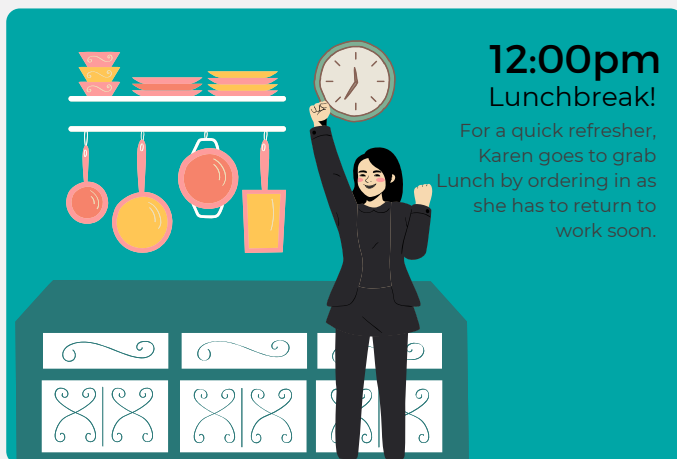
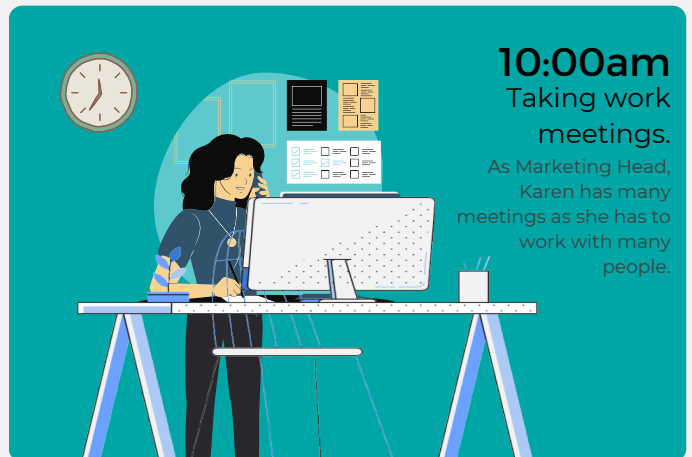
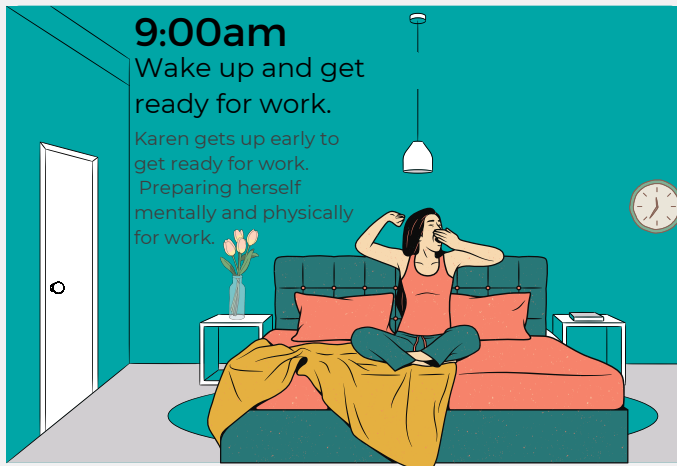
- Cannot see menu from app
- Will not know exactly when her table is ready for her

Influences

- Grab Food
- FoodPanda
- Deliveroo
- McDonald's virtual queue system

A Day in the Life

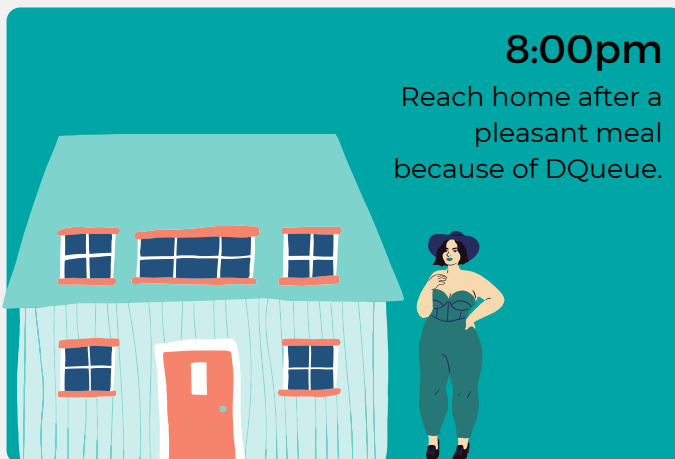
a storyboard: **Karen & DQueue**





6:30pm

Skip the queue to Tipo because she already queued from DQueue.



8:00pm

Reach home after a pleasant meal because of DQueue.



8:30pm

Do skincare and get ready for bed after shower.



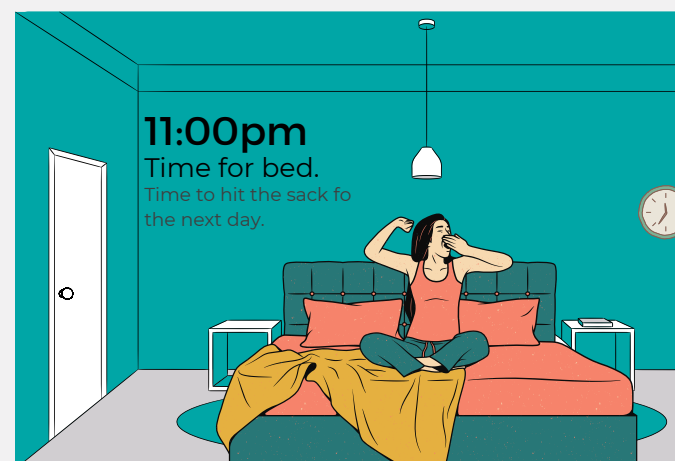
9:30pm

Scroll through social media and watch Netflix to wind down.



10:00pm



Reserve a table at iSteak for lunch tomorrow on DQueue.

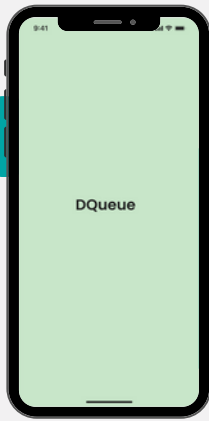


11:00pm

Time for bed.
Time to hit the sack for the next day.

User Journey

Phase of journey	Stage 1	Stage 2	Stage 3
Actions What does the customer do?	<div>Enter the app</div> <div>Look for where they want to eat</div> <div>Check reviews of the branch</div>	<div>Go to the branch and join the queue</div> <div>Go to branch to book a reservation</div> <div>select date, service</div> <div>Add number of people joining</div> <div>Confirm reservation</div>	<div>Reach when table is ready</div> <div>Give a review of the branch</div> <div>Enjoy a nice meal</div>
Touchpoint What part of the service do they interact with?	<div>FnB page</div> <div>Search to find the FnB</div> <div>Home landing page</div>	<div>Reservation booking process</div> <div>Selection for party size</div> <div>Account page</div> <div>Confirmation page for reservation</div> <div>confirmation page for queue</div>	<div>The account page to know when their table is ready</div> <div>The confirmation page to know when their table is ready</div> <div>The review page to add a review</div>
Customer Thought What is the customer thinking?	<div>It is clean and sleek</div> <div>There is a variety of food places to choose from</div> <div>It is easy to know more about them by the reviews</div>	<div>It is easy to use</div> <div>It is meticulous and thorough</div> <div>It is very direct and not a complicated process to confirm a reservation</div> <div>The date and timing is catered to me and my requirements</div> <div>I need to arrive on time so my table will not be given away</div>	<div>Comfortable to be able to skip the queue</div> <div>Not anxious about rush hour or peak hours</div> <div>Happy to be able to enjoy a meal out after many years</div>
Customer Feeling What is the customer feeling?			
Opportunities	<div>Add more recommended based off what user views more</div> <div>Promote more lesser known FnBs</div> <div>make the app more attractive at first sight</div>	<div>Make process smoother for users</div> <div>Make estimated time more accurate for users</div> <div>Use referral codes for more people to use the app</div>	<div>Have them rate DQueue highly to attract more people</div> <div>Reward users for reviewing branches to get more reviews</div>

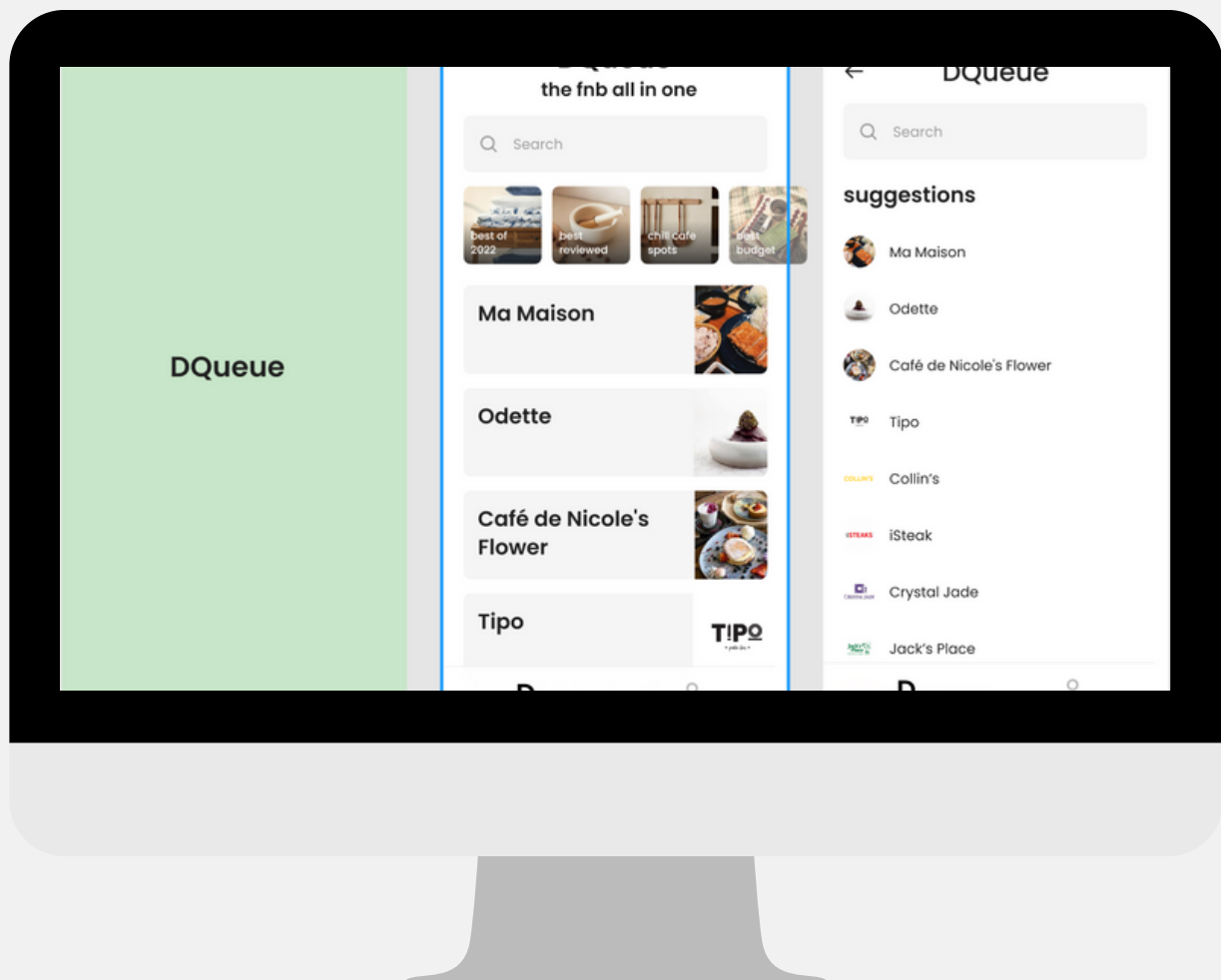


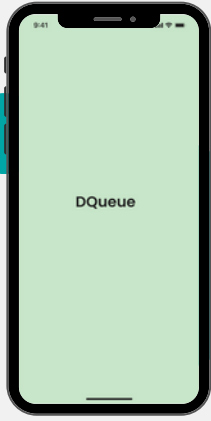
Digital Prototypes



Figma Link - <https://www.figma.com/file/J3lInGE9luDCvUjDftiJTv/DUX-ASG1>

<https://youtu.be/eKOCUOpKXAE>

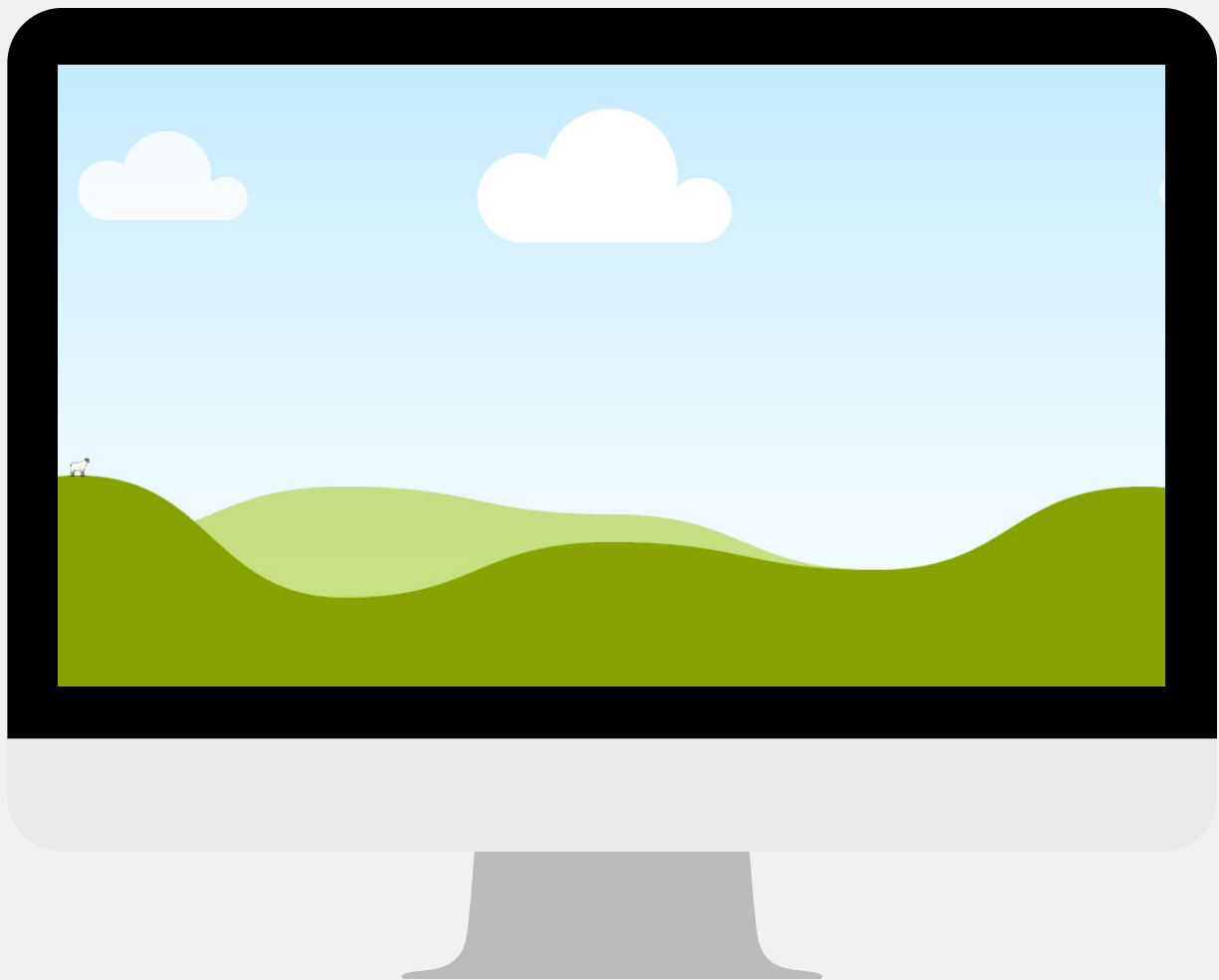




Physical Prototypes



<https://youtu.be/HT504ETCSyw>





Thank You



DQueue
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& Merchants*

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 - IM03 P03
 - Vadora Tang Wan Ni
- 