

Test document

Test cases

Unit tests and functional tests: (Weiran Zou)

1. All the code of unit tests and functional tests are in the /src/_tests_/ folder.
2. The details of test data is located in the /src/_tests_/fakenData.js file.

Test suite	Test Case ID	Test Scenario	Test Data	Expected Results	Actual Results	Pass/Fail
	1	Check getDates function		The date before current date and the current date with the format of YYYY-MM-DD will be returned	The date before current date and the current date with the format of YYYY-MM-DD will be returned	Pass
Get organization Token	2	Check getOrgToken function when fetching succeed.	Fake token	In local storage, store access token in Fake token as org_token and token type in Fake token as org_tokentype	In local storage, store access token in Fake token as org_token and token type in Fake token as org_tokentype	Pass
	3	Check getOrgToken function when fetching failed.	New Error('An error has occurred: 400')	New Error('An error has occurred: 400') will be returned	Return New Error('An error has occurred: 400')	Pass
Fetch user	4	Check fetchUser function when fetching succeed.	FakeUser_single object	The FakeUser_single object will be returned	Return FakeUser_single object	Pass
	5	Check fetchUser function when fetching failed.	New Error('An error has occurred: 400')	New Error('An error has occurred: 400') will be returned	Return New Error('An error has occurred: 400')	Pass
Fetch clock	6	Check fetchClock function when fetching succeed and the last clockins's type is not finished.	fakeClockins_onshift	The true will be returned	Return true	Pass
	7	Check fetchClock function when fetching succeed and the last clockins's type is finished.	fakeClockins_offshift	The false will be returned	Return false	Pass
	8	Check fetchClock function	New Error('An error has occurred: 400')	The false will be returned	Return New Error('An error has occurred: 400')	Pass

		when when fetching failed.				
Fetch Discount	9	Check fetchDiscount function when fetching succeed.	fakeDiscounts	The fakeDiscounts will be returned	Return fakeDiscounts	Pass
	10	Check fetchDiscount function when fetching failed.	New Error('An error has occurred: 400')	New Error('An error has occurred: 400') will be returned	Return New Error('An error has occurred: 400')	Pass
Filter Discount	11	Check filterDiscount function when on-shift is true	fakeDiscounts and true	The on-shift discounts in fakeDiscounts will be returned	Return on-shift discounts in fakeDiscounts	Pass
	12	Check filterDiscount function when on-shift is false	fakeDiscounts and false	The off-shift discounts in fakeDiscounts will be returned	Return off-shift discounts in fakeDiscounts	Pass
My button	13	Check render correctly	MyButton component	Render correctly	Render correctly	Pass
	14	Check title display	MyButton component Title: 'Login'	Display Login title	Display Login title	Pass
	15	Check logout icon when title is logout	MyButton component Title: 'Logout'	Display logout icon	Display logout icon	Pass
	16	Check click event	MyButton component onPress: jest.fn() Title: 'Login'	The click event handling function "onPress" is called once	The click event handling function "onPress" is called once	Pass
Login setup	17	Check render correctly	Login component	Render correctly	Render correctly	Pass
	18	Check render an email input tag	Login component	Render an email input tag	Render an email input tag	Pass
	19	render a password input tag	Login component	Render a password input tag	Render a password input tag	Pass
	20	Check render a Login button	Login component	Render a Login button	Render a Login button	Pass
	21	Check the default value for both fields should be empty and the error should be absence by default	Login component	The default value for both fields should be empty and the error should be absence by default	The default value for both fields should be empty and the error should be absence by default	Pass
	22	Check email input	Login component Email: zouweiran9122@gmail.com	The email input's value should be: zouweiran9122@gmail.com	The email input's value is zouweiran9122@gmail.com	Pass
	23	Check password input	Login component Password: 123456789	The password input's value should be: 123456789	The password input's value is: 123456789	Pass
Login Flow	24	Check when successful login	Email: zouweiran9122@gmail.com Password: 123456789	The partner and orgnasiation token are saved in localStorage and navigate to home screen	The partner and orgnasiation token are saved in localStorage and navigate to home screen	Pass
	25	Check when failed login	Email: zouweiran9122@gmail.com Password: 123456789 New Error('An error has occurred: 400')	The error with the message: "An error has occurred: 400" will be displayed	The error with the message: "An error has occurred: 400" is displayed	Pass

When single-job user clocked in the company having discounts and successfully fetch data	26	Check render correctly	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Render correctly	Render correctly	Pass
	27	Check render discount list	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Render discount list	Render discount list	Pass
	28	Check display “clocked in”	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Display “clocked in”	Display “clocked in”	Pass
	29	Check display on-shift discounts	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Display on-shift discounts in fakeDiscounts	Display on-shift discounts in fakeDiscounts	Pass
	30	Check not display drop menu	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Not display drop menu	Not display drop menu	Pass
	31	Check not display error and refresh button	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Not display error and refresh button	Not display error and refresh button	Pass
	32	Check pressing first discount item	fakeUser_single fakeDiscounts fakeClockins_onShift Home component On-shift Discount - 1	Navigate to discount screen and pass “on-shift discount -1” and fakeUser_single to discount screen	Navigate to discount screen and pass “on-shift discount -1” and fakeUser_single to discount screen	Pass
	33	Check pressing last discount item	fakeUser_single fakeDiscounts fakeClockins_onShift Home component On-shift Discount - 2	Navigate to discount screen and pass “on-shift discount -2” and fakeUser_single to discount screen	Navigate to discount screen and pass “on-shift discount -2” and fakeUser_single to discount screen	Pass
When single-job user clocked out the company having discounts and successfully fetch data	34	Check render correctly	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Render correctly	Render correctly	Pass
	35	Check render discount list	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Render discount list	Render discount list	Pass
	36	Check display “clocked out”	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Display “clocked out”	Display “clocked out”	Pass
	37	Check display on-shift discounts	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Display off-shift discounts in fakeDiscounts	Display off-shift discounts in fakeDiscounts	Pass
	38	Check not display drop menu	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Not display drop menu	Not display drop menu	Pass
	39	Check not display error and refresh button	fakeUser_single fakeDiscounts fakeClockins_offShift Home component	Not display error and refresh button	Not display error and refresh button	Pass
	40	Check pressing first discount item	fakeUser_single fakeDiscounts fakeClockins_offShift Home component Off-shift Discount - 1	Navigate to discount screen and pass “off-shift discount -1” and fakeUser_single to discount screen	Navigate to discount screen and pass “off-shift discount -1” and fakeUser_single to discount screen	Pass
	41	Check pressing last discount item	fakeUser_single fakeDiscounts fakeClockins_onShift Home component	Navigate to discount screen and pass “off-shift discount -2” and fakeUser_single to discount screen	Navigate to discount screen and pass “off-shift discount -2” and fakeUser_single to discount screen	Pass

			Off-shift Discount - 2			
When single-job user clocked out the company having discounts and fail to fetch data	42	Check render correctly	new Error('An error has occurred: 400') Home component	Render correctly	Render correctly	Pass
	43	Check not render discount list	new Error('An error has occurred: 400') Home component	Not render discount list	Not render discount list	Pass
	44	Check not display “clocked in” / “clocked out”	new Error('An error has occurred: 400') Home component	Not display “clocked in” / “clocked out”	Not display “clocked in” / “clocked out”	Pass
	45	Check not display drop menu	new Error('An error has occurred: 400') Home component	Not display drop menu	Not display drop menu	Pass
	46	Check display error and refresh button	new Error('An error has occurred: 400') Home component	Display error with the message: “An error has occurred: 400” and refresh button	Display error with the message: “An error has occurred: 400” and refresh button	Pass
	47	Check item in discount list is pressable	onPress: jest.fn() <Item item={item = { name: 'Test' }} onPress={onPress} />	Item in discount list is pressable	Item in discount list is pressable	Pass
When multiple-job user clocked out the authorized company having discounts and successfully fetch data	48	Check render correctly	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Render correctly	Render correctly	Pass
	49	Check render discount list	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Render discount list	Render discount list	Pass
	50	Check display “clocked out”	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Display “clocked out”	Display “clocked out”	Pass
	51	Check display on-shift discounts	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Display off-shift discounts in fakeDiscounts	Display off-shift discounts in fakeDiscounts	Pass
	52	Check display drop menu	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Display drop menu	Display drop menu	Pass
	53	Check store organisations in drop menu	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Store organisations in fakeUser_multiple into drop menu	Store organisations fakeUser_multiple into drop menu	Pass
	54	Check not display error and refresh button	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component	Not display error and refresh button	Not display error and refresh button	Pass
	55	Check pressing first discount item	fakeUser_multiple fakeDiscounts fakeClockins_offShift Home component Off-shift Discount - 1	Navigate to discount screen and pass “off-shift discount -1” and fakeUser_multiple to discount screen	Navigate to discount screen and pass “off-shift discount -1” and fakeUser_multiple to discount screen	Pass
	56	Check pressing last discount item	fakeUser_multiple fakeDiscounts fakeClockins_onShift Home component Off-shift Discount - 2	Navigate to discount screen and pass “off-shift discount -2” and fakeUser_multiple to discount screen	Navigate to discount screen and pass “off-shift discount -2” and fakeUser_multiple to discount screen	Pass
Discount screen: when the user clicked on first discount item	57	Check render Discount screen correctly	<Discount route={{params: {discount:fakeOnDiscounts[0], user: fakeUser_single}}}/>	Render correctly	Render correctly	Pass
	58	Check display clicked	<Discount route={{params: {discount:fakeOnDiscounts[0], user: fakeUser_single}}}/>	Display clicked discount’s information	Display clicked discount’s information	Pass

		discount information				
	59	Check display user information	<Discount route={{params: {discount:fakeOnDiscounts[0], user: fakeUser_single}}}/>	Display name, email, organization and employeeID in fakeUser_single	Display name, email, organization and employeeID in fakeUser_single	Pass
	60	Check display Logo	<Discount route={{params: {discount:fakeOnDiscounts[0], user: fakeUser_single}}}/>	Display Logo	Display Logo	Pass
Me screen: when successful fetch data	61	Check render correctly	fakeUser_single Me component	Render correctly	Render correctly	Pass
	62	Check display user information	fakeUser_single Me component	Display name, email, organization and employeeID in fakeUser_single	Display name, email, organization and employeeID in fakeUser_single	Pass
	63	Check render a logout button	fakeUser_single Me component	Render a logout button	Render a logout button	Pass
	64	Check clicking on log out button	fakeUser_single Me component	Clear token in localStorage & navigate to login screen	Clear token in localStorage & navigate to login screen	Pass
Me screen: when failed to fetch data	65	Check render correctly	fakeUser_single Me component	Render correctly	Render correctly	Pass
	66	Check not display user information	fakeUser_single Me component	Not display user information	Not display user information	Pass
	67	Check not render a logout button	fakeUser_single Me component	Not render a logout button	Not render a logout button	Pass
	68	Check display error and refresh button	new Error('An error has occurred: 400') Me component	Display error with the message: “An error has occurred: 400” and refresh button	Display error with the message: “An error has occurred: 400” and refresh button	Pass

Acceptance tests: (Yicong Li) (Junxian Li)

Question:

User Guide Test:

- Q: Do you want to talk through what is doing great when you first see our app?
- Q: How would you view the main page when you hit the log in?
- Q: How would you view these discounts when you're off shift?
- Q: Imagine you just clocked off from a shift at McDonald’s, let’s just say and you’d like to get 20% off at Domino’s pizza store on the way home, how would you do this?
- Q: If I was a cashier, you would provide this discount to me and I actually don’t know you are Weiran, how can you prove that to me?
- Q: imaging you’re not going to use it anymore, how would you log out?

YES/NO Question:

- Q: Do you think you could easily see on-shift discounts when discounts were available? I mean if the manager created a discount in the website, do you think you could easily do that?
- Q: How easy was it for you to infer and use the off shift discount?
- Q: Was it easy for you to change between clock in and clock out status once you understood how the system worked?
- Q: Did you have any issue viewing the discount detail at any point?
- Q: Did you have any issue viewing the me page at any point?
- Q: Now you are using the Weiran account which belongs to multiple organisations. If you instead belonged to one organisation, Do you think you have any difficulties navigating the app?

Design Test:

Q: How would you rate the whole design of this app?

Q: Would you struggle to recommend this if this app was on the play store?

Q: How do you feel about the login page?

Q: Now we've logged in, how do you feel about the design of the display of the shift?

Q: How do you feel about the design of the display of the discount detail?

Q: How do you feel about the design of the display of the me page?

Q: In the off-screen, I'm going to add an Andrews burger discount for the Macca's organization. So could you check if you can refresh your Macca's discount?

Plans

Week 10 (8, October 2021): complete test cases from 1-3, 6-47, 57-68.

Features: test utilities function, fetch API functions and functional tests for general and single-job user functionality.

Week 12 (21, October 2021): complete test cases from 4-5, 48-56 and acceptance tests

Features: unit and functional tests related to multiple-job user functionality and acceptance tests for app.

Test results

1. Unit tests and functional tests:

```
Test Suites: 8 passed, 8 total
Tests:      68 passed, 68 total
Snapshots:  9 passed, 9 total
Time:       9.817 s
Ran all test suites.
```

2. Acceptance tests:

User Guide Test:

1.

Q: Do you want to talk through what is doing great when you first see our app?

A: I can see this is an app about the discount, also, I've got an email field and a password field and I'm going to log in. I am wondering right now if I was a new user, if I needed to set this up. How do I do that? They seem like they're ready to set up for me here, right?

Q: That is in case you do not have an account.

A: Yeah, exactly.

2.

Q: How would you view the main page when you hit the log in?

A: It's the home screen I guess, because at the top there's a red button that says clocked out. And, I'm not quite sure what it does. I'm gonna click it right now. and, there's a drop down here. Okay, we've got KFC, Macca's and dominos. These are fast food stores. I presume these are the different categories of discounts, different categories. And also, the different shops that I can get discounts from. One thing I suppose I will say about the landing on this page is that it's not exactly clear what the flow is. Like what I'm meant to do, but I can figure it out by experimenting. So, by clicking around it's kind of clear what's happening.

3.

Q: How would you view these discounts when you're off shift?

A: ok, these are my discounts when I'm off shift. And a bit confused about what you mean, why would I be using this app when I'm on shift? Will I be working at that time?

Q: Yeah, exactly.

A: Okay, I've just gone to the "me" screen just to see what's there because I can see there's two screens, I wanted to explore what's on here. This is personal information which is useful if I didn't know my own name. Back to the home page, I'm going to click the big red button "clocked out", I'm not exactly sure what it does. Okay it doesn't do anything. Okay, I'm gonna click the other buttons to see what they do (Clicked discount detail button). Okay 10% off water off shift. So I'm assuming this is what I would flash and sort of show you the person at the counter. Big recognisable. I'll try another 75% off salad. This page makes more sense to me. Back to your question about how I would do it if I was on shift.

Q: I'll give you a tiny hint, so you're currently able to get your off-shift discount because you are clocked out.

A: Okay, so I could clock in. so, let me log in. I'm interested to know whether I guess I'll refresh the page or whether it will just happen. I wouldn't like to do it automatically. Like refresh is kind of like what I'd expect it to happen. Here we go, it works.

Q: Now, I'll give you a tiny hint if you actually don't know because you're in multiple organisations, you're clocked into a different organisation.

A: Oh McDonald's, I've clocked in at Macca's. I understand. Okay, I thought a button is an indicator of whether I'm clocked into the store that is next to it in the select dropdown. It looks like a button, but now I understand that's like an indicator.

Q: Why did you think it looks like a button?

A: Well, it's got a typical button shape. It's quite large, and usually the indicator is small. That is why I think it's a button not an indicator. So I thought I could click it, but I understand now and it's like an indicator.

4.

Q: Imagine you just clocked off from a shift at McDonald's, let's just say and you'd like to get 20% off at Domino's pizza store on the way home, how would you do this?

A: Okay, These are the different stores (switching organisation). I'm gonna just click the drop down, I'm looking at the different stores that I can get discounts from. I'm gonna go to Domino's. so, I'm gonna get this bacon pizza because I'm gonna see if I can get 30% off the bacon pizza. So, I clicked it, it displayed this discount and I presume what I'm gonna do is when I go up and order my pizza, then show this to the cashier.

Q: Perfect, that is what we expected. There's always a complication because sometimes you have to order online and such.

A: Yeah, great, great. I understand one thing, just a small point here, I'm really interested to know exactly how much I'm going to pay. I understand that we're getting 30% off but it's not actually telling me how much this picture is going to cost. That would be nice to have, not absolutely necessary, but it would be nice to know what I think so said to that point.

5.

Q: If I was a cashier, you would provide this discount to me and I actually don't know you are Weiran, how can you prove that to me?

A: Okay, well I might want to go over to my profile. And I could show them this which has all my personal information including my employee id. Maybe that would be sufficient for them. And, there would be a biological reference here.

6.

Q: imagining you're not going to use it anymore, how would you log out?

A: Okay, so there is a red button here in the "me" page which I suspect might be a log out button but I'm just gonna quickly head home to check. There's nothing else I think that is the logout button. It's a little wait, I just have to scroll down. Great. I logged out now.

YES/NO Questions

1.

Q: Do you think you could easily see on-shift discounts when discounts were available? I mean if the manager created a discount on the website, do you think you could easily see that?

A: I'm going to say "no" for that one, just because I wasn't really sure what this dropdown did to start with. It might be because it didn't have a label. So I didn't know that this was like my location switcher, maybe that would be clear to someone who was actually in the industry they would recognize, but I wasn't exactly sure what this did. I kind of figured it out by experimentation a bit. pretty much just this one little panel here with clocked out and then the select dropdown was the only really ambiguous bit of the whole thing. Everything else made a lot of sense.

2.

Q: How easy was it for you to infer and use the off shift discount?

A: Okay, that was kind of the same thing, so the on shift/ off shift thing with a clocked in/ clocked out indicator, that was a little bit like a button. That was a bit confusing. I did get there but that is really confusing.

3.

Q: Was it easy for you to change between clock in and clock out status once you understood how the system worked?

A: Yes, that was easy.

4.

Q: Did you have any issue viewing the discount detail at any point?

A: No, I thought that was probably one of the clearest parts.

5.

Q: Same thing, view your personal details.

A: That was also very clear, everything on the screen, clear to me. And the navigation at the bottom is ubiquitous in apps like this. It's very common. I knew exactly what to do with it. Yeah. My profile section is very clear.

6.

Q: Now you are using the Weiran account which belongs to multiple organisations. If you instead belonged to one organisation, do you think you have any difficulties navigating the app?

A: I don't think so, no, I don't think it would make much of a difference.

Design test:

1.

Q: How would you rate the whole design of this app?

A: Well, it feels like a prototype, and that's fine because that's what you do in tech. You make a prototype to test ideas. It doesn't feel polished right now, but it's usable. I would give it like a 2.5. It's like a demo in the middle. So, I can't give it any less than 50%. But it's also lacking a bit of polish..

2

Q: Would you struggle to recommend this if this app was on the play store?

A: Okay, look, I could still recommend it because it's useful and it achieves its purpose. If I want a discount, this app gets me a job done, if it was not working or full of bugs, I think I would because it still works. It's just a few UX issues around.

3.

Q: How do you feel about the login page?

A: Okay, the log-in page, actually I'm curious to know what had happened. If I just give it gibberish, I'm testing a sort of validation. I want to know if I give it a non valid email, whether it'll warn me about that, and it doesn't seem to be. So, unfortunately, I'm deducting a viewpoint for that. But again, like the most important part of the design is really like achieving the purpose that you're setting out to do and what this screen needs to do is give me a clear indication of what I need to do and that is put my email, put my password. Click log in. and it does that so it's gonna get some points for achieving its purpose. It doesn't tell me the concept of the app. I'm seeing discount discovery would be really nice, there should be a sentence below to say that link up with tanda and get discounts by showing your phone that would be really useful. You can't really go too wrong with the login screen. Look, it's gonna be a 2.5 again.

4.

Q: Now we've logged in, how do you feel about the design of the display of the shift?

A: I will give it 1. I'm sorry, that's the most confusing part for me.

5.

Q: How do you feel about the design of the display of the discount detail?

A: This page was probably the best page really. I could give it 4. I think that's really clear. Yep, displays the most important information. So that's a good visual hierarchy. Put the stuff that we care about in big text right at the top, so that's a pretty nice design page really.

6.

Q: How do you feel about the design of the display of the me page?

A: I will give that 4 as well. Yeah.

7.

Q: In the off-screen, I'm going to add an Andrews burger discount for the Macca's organization. So could you check if you can refresh your Macca's discount?

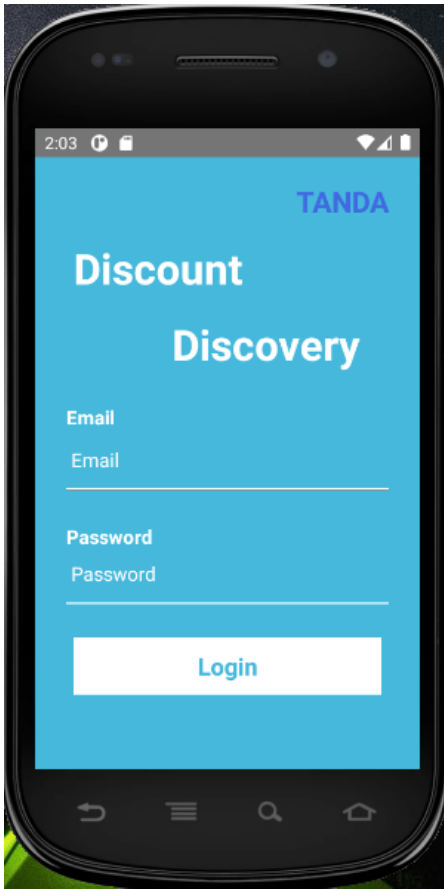
A: Yes, I can see in this one that, as I remarked earlier it would be nice to see dollars instead of percentages and this is telling me that I'm getting 5 dollars off so, it's nice right now.

Analysis:

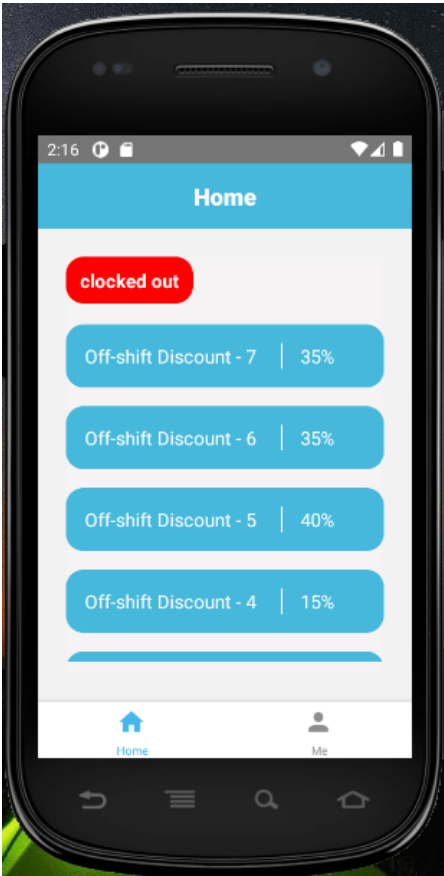
Based on the test result, it clearly indicates that our app has minor UI flow issues. For example, on the home page, the shift status is confusing for the tester. it looks like a button somehow, and the filter without a label, then makes the tester less understanding with UI flow. The tester could only understand it with experimentation and exploration, and some explanations from our client. The reason why the tester was confused is that we might need to make an instruction before the tester uses the app, because the app uses a Tanda account to log in, and most functionalities are similar to the Tanda app. Overall, this app achieved its purpose. Everything else is looking good. From the design aspect, the whole design is 2.5 of 5 for our app from the tester. It does not look like a polished design, but it's usable and useful. It just lacks polished design. If this app is uploaded on the google store or ios store, the tester would recommend this app to someone who needs it. The good thing is the discount detail page and "me" page. It clearly displays what the tester needs to know.

3. Responsive test:

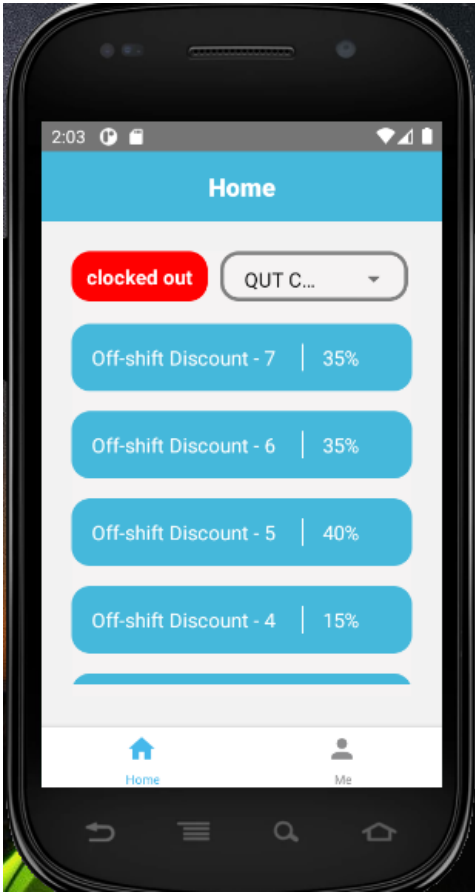
Login screen



Home screen for single-job user

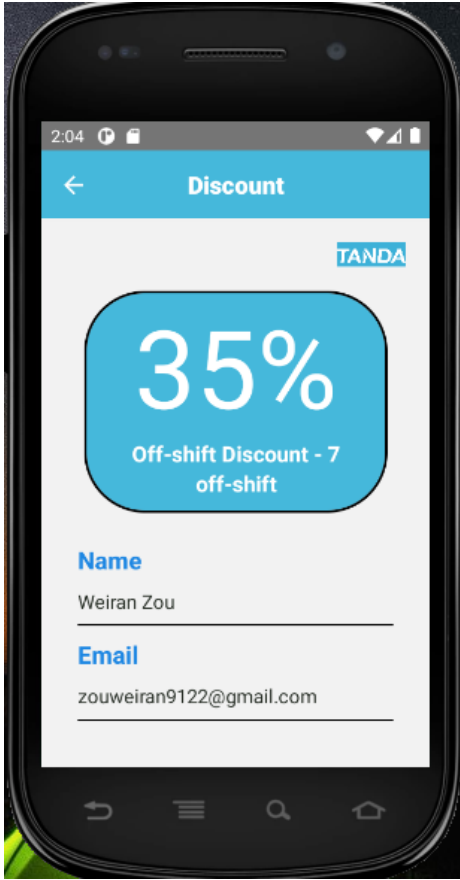


Home screen for multiple-job user

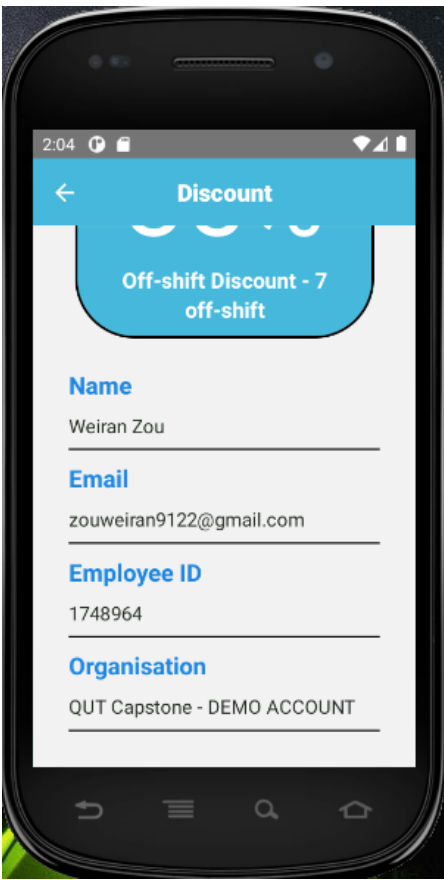


Discount screen

Before scroll

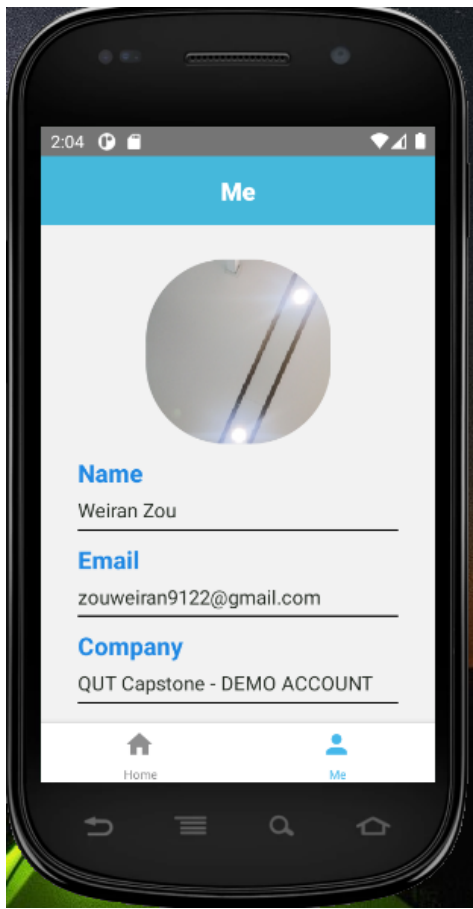


After scroll

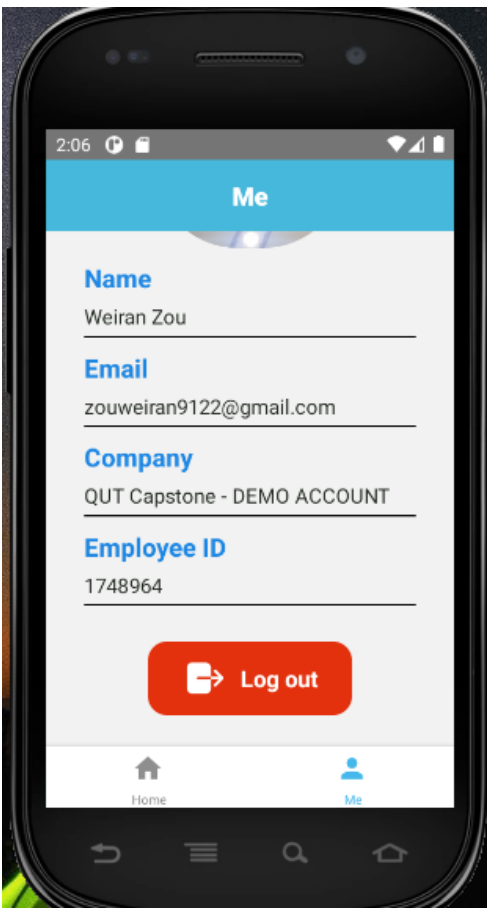


Me screen

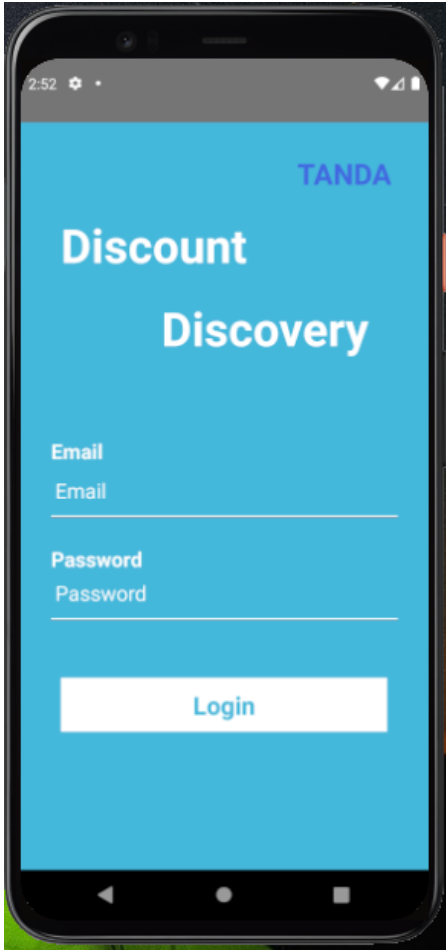
Before scroll



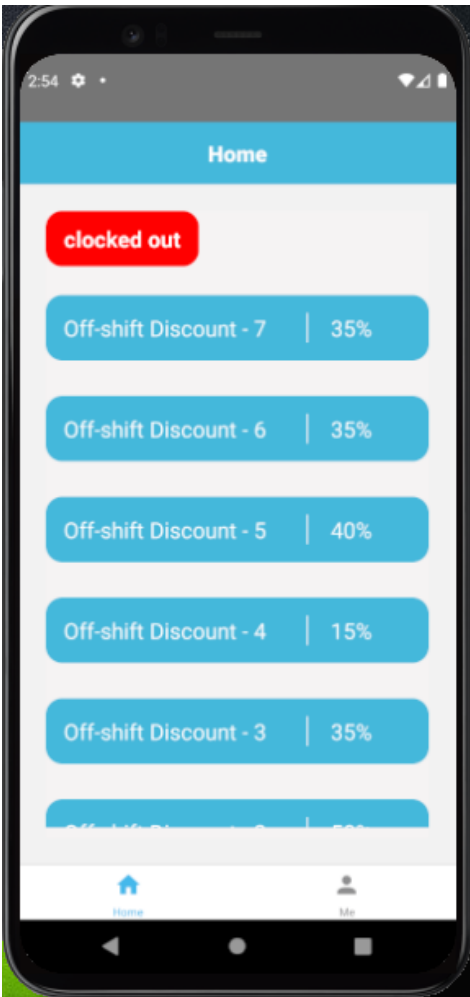
After scroll



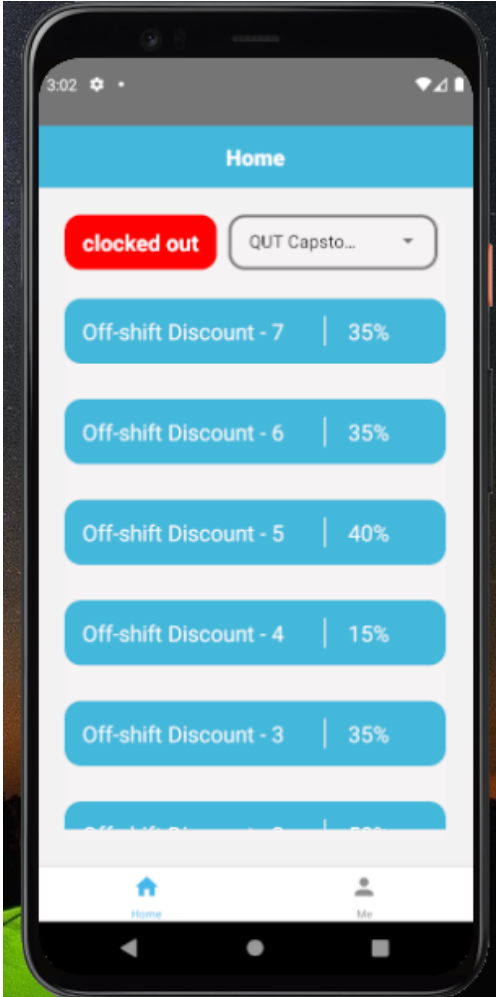
Login screen user



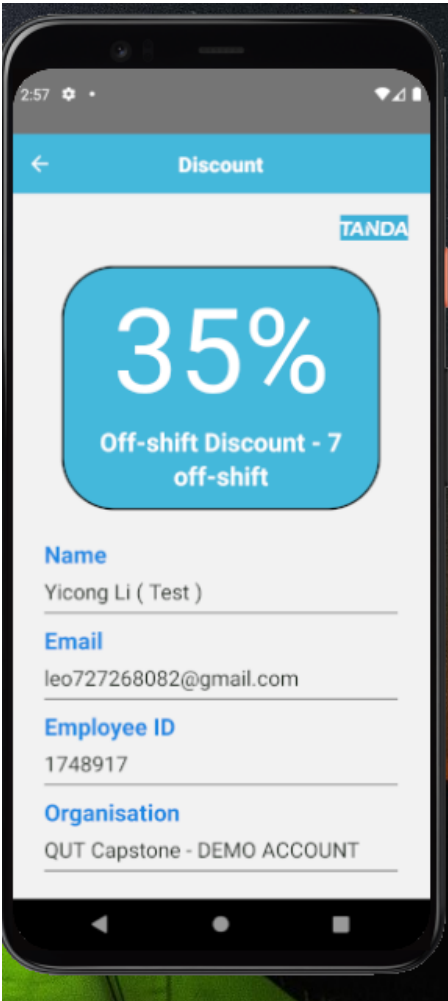
Home screen for single-job user



Home screen for multiple-job user



Discount screen



Me screen

