

BuildEvents.today

Landing Page: landing.buildevents.today

Customer Page: buildevents.today

Admin Page: admin.buildevents.today

Credentials for admin page: eventbuilder.adm@gmail.com:password

1. Problem

The event industry is outdated and extremely competitive. The services and packages offered by the event planners are considered restricted information and the clients will often take a back seat in terms of planning their event as the event planners do most of the persuading and decision making.

From the business point of view, the process of gathering client's requirement of their event is lengthy. There will usually be multiple back and forth correspondence between the event planner and the client. In fact this multiple back and forth correspondence is almost the same for each new client. And even with all these effort, time and money being invested, there is still no guarantee that the event management company will secure the deal.

Hence, there needs to be a better workflow in this pre-sales stage to benefit both clients and businesses.

2. Introducing buildevents.today

Buildevents.today is a one-stop portal for event planning. We envision it to be the online agency for event planning around the world. With our platform, we empower clients to create an event that fits their exact specifications in an intuitive and informative manner. Our website will then help to arrange the logistics, before passing over to the sales manager to close the deal. It will be a pre-sales tool that can integrate seamlessly into the workflow, reducing inefficiencies and increasing the revenue. Clients who are clueless to what type of services that they want can also browse what other event companies have done in the past. Not only that, they are also able to clone the exact same event and customize from there.

3. Competition Analysis

From interviews with the Co-Founder of Get-Out Events, he brought up the point that this industry of the event management and planning is very outdated. Furthermore, due to the competition in getting the contracts with clients, event companies are very secretive about their

plans and proposals. There are no specialized application out there that allow clients to freely browse and customize the different kinds of packages.

In fact, one potential issue that came up with this competitive scene is that competitors may look at the prices on [buildevents.today](#) and undercut the prices that we offer for our packages. This is an issue that we acknowledged and we weighed the consequences and came to a conclusion that the benefits that comes with this application will outweigh the negative impacts. With [buildevents.today](#), we can target the serious clients who value their time and the control over the kind of event that they are planning. In addition, the event planners will also spend less time persuading as the requirements are all spelt out by the clients. Event planners then can concentrate their time and effort on executing an extremely well planned event which in turn will generate satisfied and returning clients for the event management company that uses [buildevents.today](#).

4. Features & Functionalities

4.1 Client Side

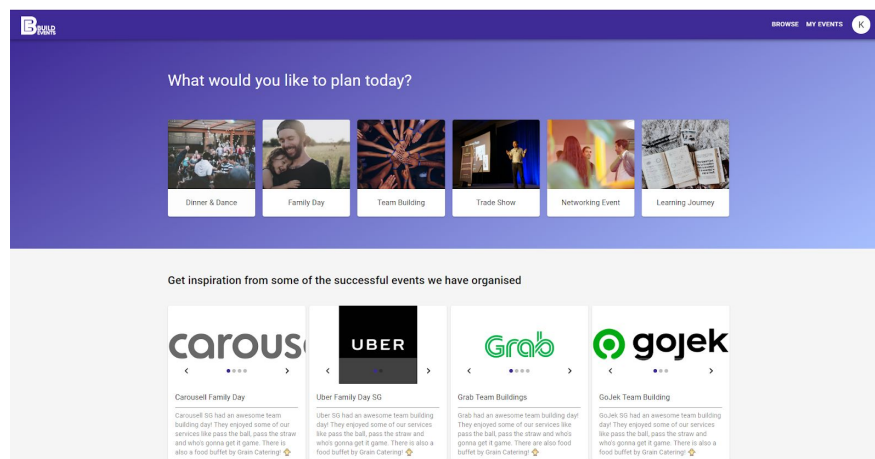


Figure 1: Home page

On our homepage, clients can get started by choosing one of the 6 event types that we support currently. If they have no ideas in mind, they can also get inspiration by browsing a few of the past events that we have organised.

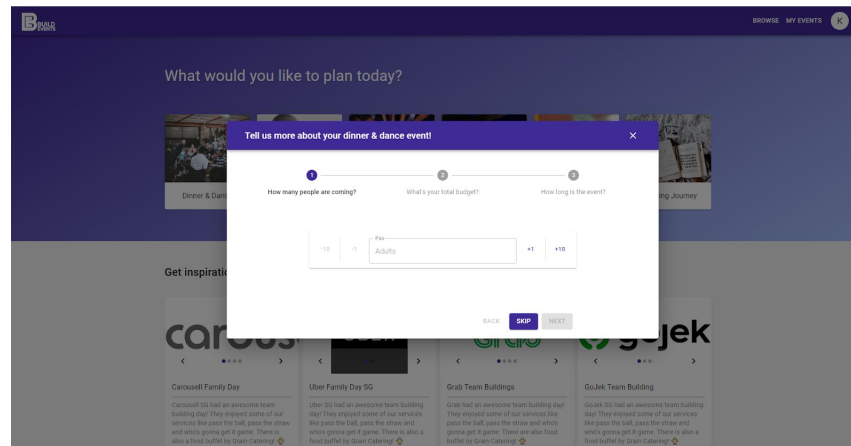


Figure 2: Wizard

After choosing the event type, a wizard will pop up to gather the important information from the client, namely pax, budget and duration. These fields are optional and clients can skip if they are not sure at the moment. Based on an interview with the founder of Get-Out Events, we realized that most of the time, their clients come to them with these 3 main information. As such, we have decided to mimic it and have this wizard.

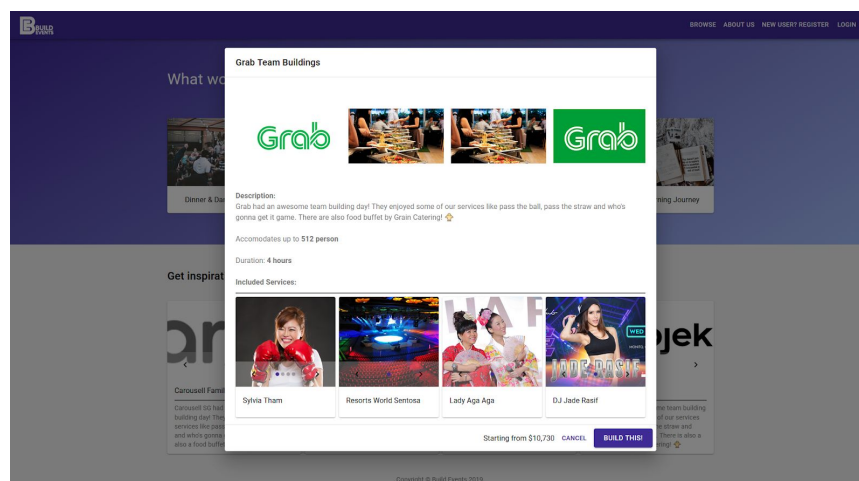


Figure 3: Successful past event

Alternatively, clients can choose to use one of the past events as a template, and they can go straight to the build page

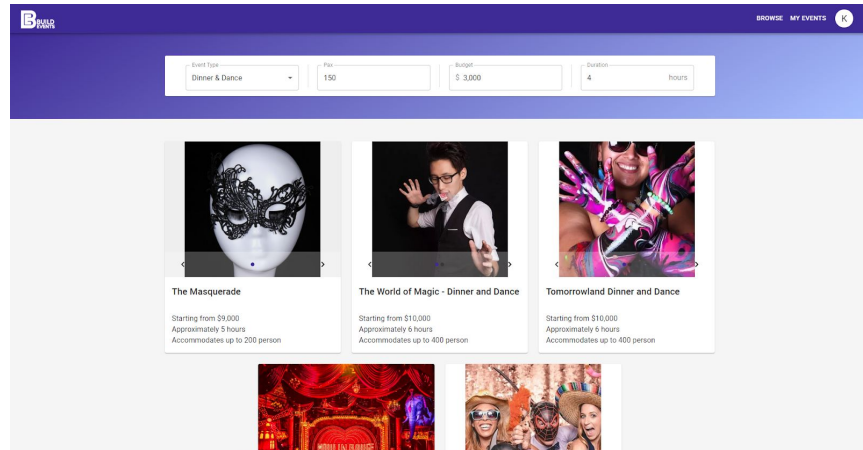


Figure 4: Browse package page

Based on the requirements keyed in by the clients, buildevents.today will then recommend the best possible packages that fits the requirements. However, due to the limited packages that buildevents.today has, we currently do not filter out any packages but instead sort the package based on the requirements.

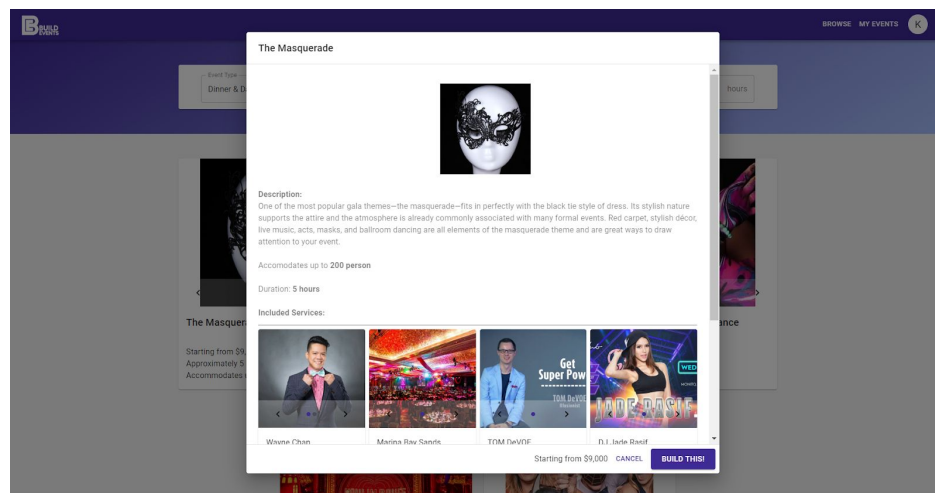


Figure 5: Package Modal in browse package page

By clicking on the package that the user is interested in, we will then display the description and the services that is included in this package.

BROWSE MY EVENTS

The Masquerade

Customize your services

Transport

Venue

Talent & Artist

Stage Entertainment

Gifts & Prizes

Games and Activities

Food and Beverages

DJ

DJ Jade Rasif

4 hour

More Info Remove

Matthew

3 hour

More Info Remove

Edwin

How 4 hours

More Info Select

EMCEE

Musicians

Summary

Event Type: Dinner & Dance
Package Price: \$9,900.00

Venue

- Marina Bay Sands 5 hour (in Package)

Talent & Artist

- EMCEE 3 hour (in Package)
- Mr. Artist 3 set (in Package)

Stage Entertainment

- Mr. Jang Modern Magic Show 2 show (in Package)
- Mr. Buffie Magic Show 3 show (in Package)

Gifts & Prizes

- Stage Game Prizes 10 piece (in Package)

DJ

- DJ Jade Rasif 4 hour @ \$1,805.00
- Matthew 3 hour @ \$1,480.00

EMCEE

- Wayne Chan 3 hour (in Package)

Expected Cost: \$12,045.00

Notes to us:

Number of attendees: 200

When is your event starting? 23/11/2019 - 04:00 pm

Duration of event: 5 Hours

BOOK NOW

Figure 6: Build page to customize package

On the build page, the summary panel on the right provides the client with a clear overview of the services included in the package. On the left, the various accordions allow the client to customize the package by adding and removing services. The package details will be updated in real-time on the summary panel. Once satisfied, the client can click the book now button, and a sign up/sign in pop up will appear in order to gather the client's contact details.

The Masquerade

Processing Contacted Quoted Accepted

Your event is being processed and you will be contacted in 1 working day!

Customize your services

Transport

Venue

Talent & Artist

Stage Entertainment

Gifts & Prizes

Games and Activities

Food and Beverages

DJ

EMCEE

Musicians

Summary

Event Type: Dinner & Dance

Package Price: \$9,000.00

Venue: Marina Bay Sands

Talent & Artist: Total Service 3 hour (in Package)

Stage Entertainment: Total Service 3 show (in Package)

Gifts & Prizes: Total Service 10 piece (in Package)

DJ: Total Service 4 hour @ \$1,650.00

EMCEE: Total Service 3 hour @ \$1,440.00

Expected Cost: \$12,045.00

PROPOSE CHANGES

Figure 7: Booked event that is processing

After the customer successfully books the event, the customer will then have to wait for the salesperson to review and contact the customer about the event, which will be within 1 business day. During the “Processing” and “Contacted” stage, the customer will still be able to propose changes to the event. Once satisfied with the current state of the event, the salesperson can then proceed to contact all the relevant point of contact to make sure that they are available to render their service to the event.

The Masquerade

Processing Contacted Quoted Accepted

All relevant stakeholders have agreed and confirmed their availability. Please proceed to sign and confirm the quotation.

Quotation

Event Quotation

Event Name: The Masquerade

Event Date: 23/11/2019

Event Time: 19:00

Event Location: Marina Bay Sands

Event Price: \$12,045.00

Item	Description	Qty	Unit Price	Amount
Dinner	Dinner for 100 pax	1	\$9,000.00	\$9,000.00
Drinks	Drinks for 100 pax	1	\$1,650.00	\$1,650.00
Entertainment	Entertainment for 100 pax	1	\$1,440.00	\$1,440.00
TOTAL				\$12,045.00

UPLOAD SIGNED QUOTATION

Figure 8: Event that has quotation sent

Once both sides have agreed to the details of the event, the event planner can upload a quotation to the order, which the client can sign and upload back to BuildEvents.today. At this point, the deal is taken to be closed and the event planner can change the status of the event to “Accepted”.

4.2 Admin Side

BuildEvents			Dashboard	Service Types	Services	Event Types	Packages	Providers	Settings ▾
Filter Status									
PENDING ▾			Filter						
root@root.root			root@root.root						
Event Date: 16/11/2019 04:18 pm			Event Date: 16/11/2019 04:18 pm						
Event Type: Team Building			Event Type: Learning Journey						
Attendees: 0			Attendees: 256						
Contact:			Contact:						
Date Applied: 14/10/2019 12:25 pm			Date Applied: 19/10/2019 02:09 pm						
Status: Pending			Status: Pending						
exts@gmail.com			exts@gmail.com						
Event Date: 16/11/2019 04:18 pm			Event Date: 16/11/2019 04:18 pm						
Event Type: Family Day			Event Type: Family Day						
Attendees: 50			Attendees: 50						
Contact:			Contact:						
Date Applied: 04/11/2019 04:00 pm			Date Applied: 04/11/2019 04:00 pm						
Status: Pending			Status: Pending						
tham@gmail.com			tham@gmail.com						
Event Date: 16/11/2019 04:18 pm			Event Date: 16/11/2019 04:18 pm						
Event Type: Family Day			Event Type: Family Day						
Attendees: 40			Attendees: 40						
Contact:			Contact:						
Date Applied: 11/11/2019 03:00 pm			Date Applied: 11/11/2019 03:00 pm						
Status: Pending			Status: Pending						
kjunwei1996@gmail.com			kjunwei1996@gmail.com						
Event Date: 16/11/2019 04:18 pm			Event Date: 16/11/2019 04:18 pm						
Event Type: Dinner & Dance			Event Type: Dinner & Dance						
Attendees: 400			Attendees: 400						
Contact:			Contact:						
Date Applied: 20/11/2019 11:00 am			Date Applied: 20/11/2019 11:00 am						
Status: Pending			Status: Pending						
kjunwei1996@gmail.com			kjunwei1996@gmail.com						
Event Date: 16/11/2019 04:18 pm			Event Date: 16/11/2019 04:18 pm						
Event Type: Family Day			Event Type: Family Day						
Attendees: 100			Attendees: 100						
Contact:			Contact:						
Date Applied: 20/11/2019 05:00 pm			Date Applied: 20/11/2019 05:00 pm						
Status: Pending			Status: Pending						

Figure 10: Pending events page

The administrator will have a set of pending events on their dashboard by default. All these pending events are events that clients have applied for. We also have other event status such as “contacted”, “quoted”, “cancelled” and “accepted”. In contacted events, it means that the sales personnel have contacted the clients to ensure that they have actually made the order for a particular event. As for quoted event, it would mean that the sales personnel have made sure that all relevant services have been tentatively booked and they are ready for the event. The sales personnel would then generate a quotation and upload it for the client.

BuildEvents

Dashboard Service Types Services Event Types Packages Providers Settings

Status of event

Status: Quoted

Update event status:

QUOTED

Update

Clone this

You can make this event available to other users as well by making it a past event!

Make this a past event

Quotation

Upload Quotation for client

Choose file No file chosen

Download signed quotation

User have not uploaded the signed quotation yet.

Applied by:

Email: kohchhao@gmail.com

Phone Number: 0

Based on package:

Package: Fun filled Family day

More Details

Total Pax: 40 pax

Requested Duration: 04 hours

Services applied:

#	Name	Amount Required	Price	Note to admin
0	Sylvia Tham	2	2880.00	
1	Beng Tai Transport	100	1006.00	
2	Playspace Space Venue Rental + Service Charge	2	10272.00	

Figure 11: Applied events page

Clicking into the applied events, we can see all the details that are important for the sales personnel to close the deal namely, client information, pax, duration of events and services. Within this page, the sales personnel can change the status of event and upload the quotation for the clients and download the signed quotation from the client. Furthermore, the sales personnel or administrator can easily clone this event and make it as a past event for other clients to see.

BuildEvents

Dashboard Service Types Services Event Types Packages Providers Settings

Add new type























#	Name of Service Type	Is Active	Actions
1	Transport	YES	 
2	Logistics	NO	 
3	Venue	YES	 
4	Talent & Artist	YES	 
5	Stage Entertainment	YES	 
6	Photographer	YES	 
7	Lighting	NO	 
8	Human Capital	NO	 
9	Gifts & Prizes	YES	 
10	Games and Activities	YES	 
11	Food and Beverages	YES	 

Figure 12: Service Types page with add and edit feature

In this service types page, the administrator can add and edit service types and toggle their visibility from the client as well. So when a client is at the build page on the client website, they would not be able to see the service type. When adding a service type, the administrator can choose if they allow multiple or single selection of services from this type.

#	Service Type	Country	Provider	Name	Description	Cost	Unit	Min quantity	Max quantity
1	EMCEE	Singapore	GetOut Events	Sylvia Tham	Sylvia began hosting events close to 20 years ago. She is effectively bilingual in English and Mandarin. Whether it is a formal corporate dinner, weddings, voice over recordings or exciting and interactive roadshow, you can rest assured your event is in good hands. Shownet at https://youtu.be/3c90NEJxqWUNote: 4 hours	1200.00	hour	1	3
2	EMCEE	Singapore	GetOut Events	Wayne Chan	With his experience as a Broadcast Presenter with Channel NewsAsia and 93.8 Live, coupled with his expertise as a PR Practitioner and Events Manager, Wayne Chan is an ideal choice to host your event. Shownet at https://youtu.be/czlpP6c3TVicNote: 4 hours	1200.00	hour	1	3
3	DJ	Singapore	GetOut Events	D.J. Jade Rasif	Jade is best known for playing Sheila Oh on Tanglein, from seasons 1 to 3, and for placing first runner-up in New Paper New Face 2013. Jade Rasif has performed in Singapore, Thailand, and Malaysia.	1000.00	hour	1	

BuildEvents

DashboardService TypesServicesEvent TypesPackagesProvidersSettings

Add new service

#Service TypeCountryPhoto

1EMCEESingaporeGlobe

2EMCEESingaporeGlobe

3DJSingaporeGlobe

Add new service

Select Service Type
Choose here

Select Country
Choose here

Select Provider
Choose here

Name
Name

Description
Description

CostUnit
0per hour, per minute, per d

Min Quantity (Required)Max Quantity (Optional)
Minimum quantityMaximum quantity

MarkupTax
0000.00

Upload at least 1 photo
Choose fileNo file chosen

CostUnitMin quantityMax quantity

200.00hour13

200.00hour13

000.00hour1









BuildEvents				
Dashboard Service Types Services Event Types Packages Providers Settings				
Add new type				
#	Name of Event Type	Service Types	Image	Actions
1	Team Building	9		
2	Learning Journey	5		
3	Trade Show	11		
4	Family Day	14		

Figure 15: Event Types page with add and edit feature

BuildEvents

Dashboard Service Types Services Event Types Packages Providers Settings

Add New Package

#	Country	Name	Event Type	Description	Public visibility
1	Singapore	Fun filled Family day	Family Day	Our corporate family day package offers a different experience from the rest. With entertaining emcees, tasty food stalls, fun games for the kids and even challenging tele-matches for kids adults, a Get Out! family day will constantly engage and entertain your guests! We have designed our family day Singapore package to include all you need to run a successful and fun family day for your company, and if you ever need us to go a little further with the event simply take a look at our optional top-ups.	YES
2	Singapore	Tomorrowland Dinner and Dance	Dinner & Dance	Tomorrowland is an electronic dance music festival, and is widely described the event as "the most elaborate festival on earth". Featuring the best EDM music, this theme is sure to ignite the party in you!	YES
3	Singapore	The World of Magic - Dinner and Dance	Dinner & Dance	Potter fanatics rejoice! The World of Magic theme models itself after Harry Potter's magical world. This highly interactive theme features magical shows, quidditch games, and wizard wand fights.	YES
4	Singapore	Coachella - Dinner and Dance	Dinner & Dance	Coachella is an annual music and arts festival features musical artists from many genres of music, including rock, indie, hip hop, and electronic dance music, as well as art installations and sculptures.	YES
5	Singapore	Family Day Carnival	Family Day	Lauded by Condé Nast Traveller as one of the World's Best Beach Clubs, this beach club is a serene sanctuary located on the finest sun-soaked stretch of sand in Sentosa. Designed to straddle the line between indoors and outdoors, the beach club takes its cue from the seaside homes of yesteryear, mid-century modernism and nostalgic maritime influences.	YES

Figure 16: Packages page with add and edit feature

BuildEvents

Dashboard Service Types Services Event Types Packages Providers Settings

Add New Package

#

Country

Name

Event Type

Description

Public visibility

1

Singapore

Fun filled Family day

Family Day

Our corporate family day package offers a different experience from the rest. With entertaining emcees, tasty food stalls, fun games for the kids and even challenging tele-matches for kids adults, a Get Out! family day will constantly engage and entertain your guests! We have designed our family day Singapore package to include all you need to run a successful and fun family day for your company, and if you ever need us to go a little further with the event simply take a look at our optional top-ups.

YES

2

Singapore

Tomorrowland Dinner and Dance

Dinner & Dance

Tomorrowland is an electronic dance music festival, and is widely described the event as "the most elaborate festival on earth". Featuring the best EDM music, this theme is sure to ignite the party in you!

YES

3

Singapore

The World of Magic - Dinner and Dance

Dinner & Dance

Potter fanatics rejoice! The World of Magic theme models itself after Harry Potter's magical world. This highly interactive theme features magical shows, quidditch games, and wizard wand fights.

YES

4

Singapore

Coachella - Dinner and Dance

Dinner & Dance

Coachella is an annual music and arts festival features musical artists from many genres of music, including rock, indie, hip hop, and electronic dance music, as well as art installations and sculptures.

YES

5

Singapore

Family Day Carnival

Family Day

Lauded by Condé Nast Traveller as one of the World's Best Beach Clubs, this beach club is a serene sanctuary located on the finest sun-soaked stretch of sand in Sentosa. Designed to straddle the line between indoors and outdoors, the beach club takes its cue from the seaside homes of yesteryear, mid-century modernism and nostalgic maritime influences.

YES

Add New Package

Name

Select Country

Choose here

Select Event Type

Team Building

Total Pax

0

Price of Package

\$ 0

Total Duration of Events (1-24hrs)

1 hr

Short description of the event

Visible to public?

☒

Logistics

Select Service Type

Choose here

Quantity

0

Figure 17: Creating new packages

Mode: READING Edit

Name

Fun filled Family day

Country

sg

Select Event Type

Family Day

Total Pax

50

Price of Package

\$ 2000.00

Total Duration of Events (1-24hrs)

04 hr

Short description of the event

Our corporate family day package offers a different experience from the rest.

Visible to public?

☒

Select Service Type

Quantity

Sylvia Tham

2

Select Service Type

Quantity

Beng Tat Transport

100

Select Service Type

Quantity

Dome Tent

2

Select Service Type

Quantity

Oscillatory Fans

50

Select Service Type

Quantity

Playspace Space Venue Rental + Se

2

Select Service Type

Quantity

Giant Monopoly

4

Add another service

Upload at least 1 photo

Choose file No file chosen

Choose file No file chosen

Choose file No file chosen

Choose file No file chosen






Figure 18: Individual package page

BuildEvents Dashboard Service Types Services Event Types Packages Providers Settings

Add New Provider

#	Name of Provider	Email	Services	Actions
1	GetOut! Events	platyunyu@gmail.com	71 services	
2	Scape	scape@gmail.com	6 services	
3	Grain Catering	grain_catering@gmail.com	3 services	
4	Hup Chung	hup_chung@gmail.com	15 services	
5	Sonic Prints	sonic_prints@gmail.com	1 services	
6	De Souu Republic	de_souu_republic@gmail.com	2 services	
7	Get Out! Events	fs@getout.events	1 services	
8	Stylist Journey	stylist_journey@gmail.com	1 services	

Figure 19: Providers page with add and edit feature

5. Application Design

5.1 Application Architecture

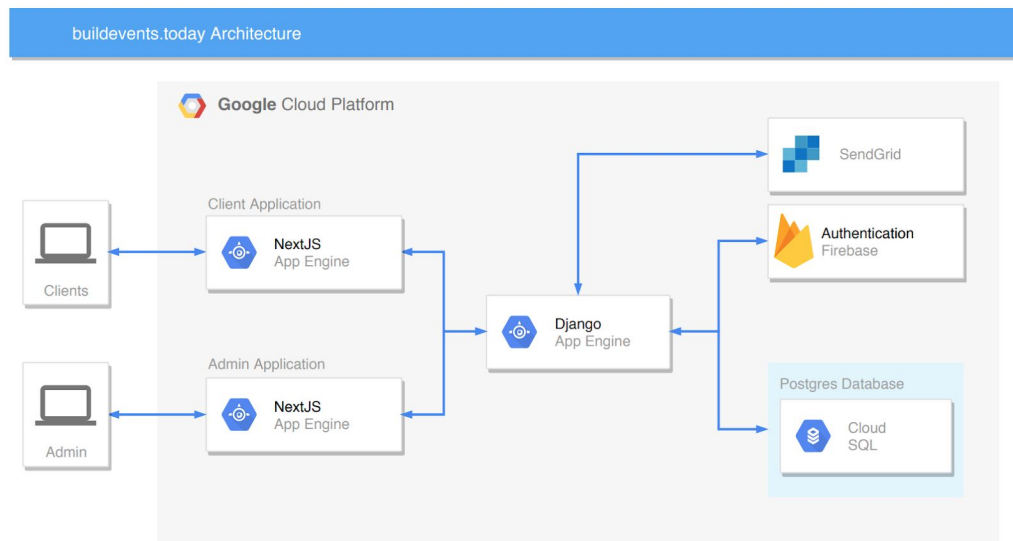


Figure 20: Application Architecture

For our client side application, we have chosen to use NextJS because as compared to Single Page Application (SPA), NextJS is simply much better in terms of SEO. And from a business point of view, SEO optimization is important in terms of marketing and being able to appear at the top of Google search will not only bring in users but also revenue. For the admin side application, although SEO optimization is not necessary, we wanted to standardize the framework usage so to allow better knowledge sharing between developers in the team.

The backend of the application is supported by Django and is built on top of PostgreSQL. We chose Django because it offers us with a simple ORM framework to prototype quickly.

5.2 Database Schema

<https://dbdiagram.io/d/5d921f8fff5115114db4c3cb>

We designed our schema to reflect the problem domain as close as possible, with the flexibility and generality to expand the product in the future. To quote Prof Ben, “Schema is cheap but getting it right the first time is hard.”.

5.3 API

<https://eventbuilder.docs.apiary.io/#>

6. Review of Project Schedule

6.1 Milestone 1

Monday, 14 October 2019, 23:59	<p>Milestone 1</p> <ul style="list-style-type: none">- Client Frontend<ul style="list-style-type: none">- Login- Browse packages- Built packages- Book packages- View progress of booked packages- Show quotation of booked packages- Backend<ul style="list-style-type: none">- Database designed- Send email to “tentative” the external contractors → can accept/reject.- Admin Portal Frontend<ul style="list-style-type: none">- CRUD of services- CRUD of event types- CRUD of packages- List all services- List all event types- List all packages- Minimal design- Devops<ul style="list-style-type: none">- Setup Firebase Auth- Setup Google Cloud SQL- Setup Google Cloud AppEngine- Heroku Deployments
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For milestone 1 we aimed to create an MVP that is able to achieve the primary user goal, which is to build an event. This is so that we can test out the main user flow as early as possible. We were able to complete most of the tasks for this milestone, except for the client frontend, which is still lacking the ability to build and book events. However, after showing our prototype and overall plan with Prof Ben, we received much important feedback from Prof Ben, which prompted us to revamp the scope and the design of our product. With the DevOps and the backend set up properly, the delay in the client frontend did not matter much, since we have to redesign the UI/UX.

6.2 Milestone 2

Monday,	<p>Milestone 2</p> <p>Client Frontend</p>
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28 October 2019, 23:59	<p>Built packages (continuation from milestone1) Book packages (continuation from milestone1) View progress of booked packages Show quotation of booked packages View and download confirmed quotation as PDF View and download signed quotation Update progress bar of booked package.</p> <p>Backend</p> <p>Add Event API</p> <p>Admin Portal Frontend</p> <p>CRUD of Events page (continuation from milestone1) Confirm client's quotation by changing status to CONFIRMED. Beautify admin portal.</p> <p>DevOps</p> <ul style="list-style-type: none"> - Refactor previous devops attempts - Introduce staging environment - Set up google cloud storage - Unlink from heroku, and host frontend in App Engine <p>Consumer contract report.</p>
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In milestone 2, we had to revamp our entire client-facing UI/UX. We aimed to let the website go live and released to GetOut! Events for them to test. In order to achieve this goal, we channeled most of the manpower to the development of the client site. We were able to roll out our MVP by the deadline and the feedback from both GetOut! Events and Prof Ben were favourable. However, there was a change to the price structure that required some rework on the backend, so we had to push back our official launch by a few days.

6.3 Milestone 3

Monday, 3th November 2019, 23:59	<p>Milestone 3</p> <ul style="list-style-type: none"> - Client frontend <ul style="list-style-type: none"> - Allow customer to sign up before continuing with booking of event. - Better visualisation of client's event page to include a progress bar - Add editing of event during "PENDING" and "CONTACTED" state. - Successful event on home page - Landing page - Admin frontend <ul style="list-style-type: none"> - Extensive user testing by using it to populate data - Backend <ul style="list-style-type: none"> - Copy-on-write for client's event when event is on "PENDING" and "CONTACTED" state. - Add API to store client's event information when signing up. - Customer contact report
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In milestone 3, we are left with touching up of the application and finalizing the workflow after the customer has booked the event. For milestone 3, we managed to get everything up and was ready for the final presentation the next day.

7. Customer Contact Report

7.1 First Interview (Felix)

Our first interview with Felix was carried out right before the end of milestone 2. At that point of time, we are mostly done with the workflow from homepage to customizing of event page.

Procedures:

1. We let him use the website with no prompts, but he can ask questions to clarify.
2. We gave him a primary objective of planning a family day.
3. We asked him to verbalise his thoughts and reactions as he interacted with the website.

Observations:

1. In the wizard, the user wants to go back to a particular step to change a value, but the wizard sends him back to the first step.
2. User had a hard time reading the monetary values because money isn't well represented with breakpoints.
3. User was quite lost in the build page initially because he did not know what was included in the package and what can be added.
4. User likes how all the services are shown on the build page, allowing for him to see what's available, but he also remarked that it is a bit overwhelming.
5. User thinks that the "Build this" button in the package modal in browse page is not "loud and bright" enough.

Post Testing Interview:

1. Felix confirmed with us that he is using linear pricing for all the services in GetOut! Events.
2. Felix then went on to tell us the type of people that will use the application are HR executive that are usually not so IT savvy.

Main lessons learnt:

1. Felix gave us insights into how to attract customers in terms of enhancing the user interface. For example, he told us that putting past events within the home page will attract potential companies to match other companies past events.

Changes to be implemented:

1. Update the wizard such that the user is able to edit his requirements without restarting from the start.

2. Add formatting to monetary amounts.
3. Add MaterialUI's chips beside each service types to indicate the services that are being selected.
4. Change database schema to accommodate the linear pricing.
5. Add past events to home page and allow users to build new events based on past events.

7.2 Second Interview (Felix)

Our second interview with Felix was carried out after milestone 3. At this point, we had completed our product and we wanted to get some final feedback from him as well as discuss how we can deploy BuildEvents.today to his clients.

Procedures:

1. Since Felix has already tried out our main user flow, we asked him to try out 2 additional user flows beside the main user flow.
2. First additional user flow was browsing past events and using past events as templates.
3. Second additional user flow was customizing a package on the build page.
4. Once again, we let him use the website with no prompts, but he can ask questions to clarify.
5. Similarly, we asked him to verbalise his thoughts and reactions as he interacted with the website.

Observations:

1. User liked the changes to the build page, namely the chips showing what services are included in the package, and what services were added on.
2. User also liked the changes to the summary panel, where the different services are highlighted with appropriate colours and can be linked back to the categories on the left.
3. User missed the snackbar that notifies him of successful login.
4. Error message from failed sign up is insufficient for user to debug.
5. User was unsure whether the booking went through, as he did not notice the changes to the page.

Post Testing Interview:

1. Felix suggested that we might not actually need the user to verify their email before accessing their booked event. Because in the process of generating leads, the first order of business should be for the salesperson to quickly call the customer as soon as possible to finalize the deal.

Main lessons learnt:

1. The suggestion given by Felix regarding the important business process was helpful and we thought that implementing it could certainly improve the application. However, due to the time constraints, we did not implement the workflow for unverified users.

Changes to be implemented:

1. Improve the error message of failed login/signup.

7.3 Third Interview (Client)

Our third interview was conducted with an Accounting manager that was involved with planning events within the company. At this point, we had completed our product and we wanted to get some final feedback.

Procedures:

1. User was asked to book an event.

Observations:

1. User seem confused at the home page of what each event type is and seem to be looking for some form of description.
2. Within the wizard, it took the user awhile to calculate the total budget because the budget the user had was per head instead of total budget.
3. User seem to understand the flow of the wizard as they followed the instruction of clicking next after filling up the details.
4. User seems to understand that the card is clickable and understands the content within the card. Did not have a problem navigating the browse page.
5. Clicked on one of the family day package and clicked on "build this".
6. The user did not have any problem navigating the build page and managed to book an event.

Post Testing Interview:

1. User said that certain service types should not be displayed to the users at all. Eg: Logistics, Transportation. To them as long as they get a bus ride to and fro the location, they do not care which bus company.
2. User also said that the summary panel on the build page should be fixed when scrolling. This way they can see changes to the summary panel at any time when they add or remove something.
3. User also suggested that within the built page, there should be a print button for the user to print out the event. The purpose of this is so that they can show it to their supervisor.
4. When discussing about the homepage, the user suggested that there should be some way to show what each event type is about. Probably the user is looking for some description.

Main lessons learnt:

1. Certain service types can be hidden from the user since it does not make any sense for them to choose from different logistics items.
2. We have to think about certain features in the corporate terms.

Changes to be implemented:

1. Admin to hide certain service types from clients.
2. Summary of event in the quoted and accepted page.

7.4 15th STePS

During the recent STePS event, there were a few people that came to our booth and told us that they would use [buildevents.today](#). There was a particular lady that stood out to us as she was an event planner within NUS. She told us that every time she plans for an event, it is very tedious and most events that she plans are rather similar to each other. Furthermore, she told us that whenever she plans for an event, she would need to contact the event planning company and go through the tedious process of telling them what she needs.

Next we have someone from Schlumberger that came to our booth and told us that our [buildevents.today](#) will be useful for his company because they have an upcoming family day and that their HR personnel could use our website to plan for the family day.

7.5 Google Analytics

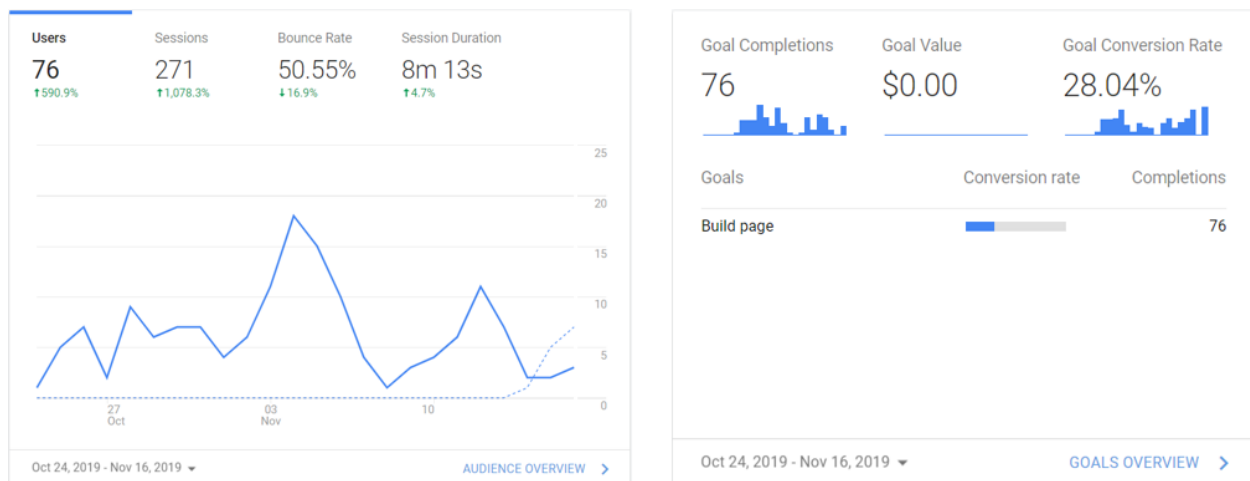


Figure 21: Google Analytics

Through our marketing efforts and testing from GetOut! Events, we have garnered up to 76 users, at one particular peak we have around 18 different users using our site in 1 day. We have also set a goal using google analytics. Whenever a user enters the page where user can customize their event, we record it as a goal completion. With that, we recorded a 28.04% in goal completion. Some contributing factors to a somewhat low 28.04% might possibly include:

1. Corrupted data from multiple testing from us and GetOut! Events.
2. Customer might be psychologically deterred to enter the build page due to the high cost that may come with planning such an event.

8. Future Plans and Strategies

The end goal for BuildEvents.today is to be able to replace a traditional event planning company in its entirety and then to translate the business model to other sectors of the service industry, such as tour providers or wedding planners.

To achieve this goal, we plan to continue to test and improve the client-side UX to identify the best way to gather and capture leads. Once we have created a working pre-sales funnel, we can then implement backend features to improve the efficiency and scalability of the business. Planned features include an easy way for different service providers to indicate their interest in joining the platform. Doing so can enable the business to scale quickly and provide a greater variety of services for clients.

However, we do not foresee ourselves having the extra bandwidth to continue this project, so we are in the process of negotiating a handover to Felix.

9. Insights from Final Project

After our initial meeting with GetOut! Events, we envisioned BuildEvents.today to be a one-stop event planning platform, able to replace an entire event planning company. Thus we planned an extensive list of backend features, which on hindsight were not necessary at this stage. One key lesson that we learned from Prof Ben is sales matters. We had to validate that our idea is able to bring in revenue, before expanding the features list. With this lesson in mind, we realigned our goals with GetOut! Events, to create a pre-sales tool that is able to increase sales. If the basic idea works, then we can think of building more features to make even more money.

Most of the time the client doesn't really understand what they need nor describe what they want. Felix has a really grand idea of what BuildEvents.today can be, but to achieve that goal requires some careful planning of the roadmap. Many of the biggest tech companies did not achieve success overnight. Instead, they were able to do one thing really well, and got to where they are today through a series of small wins. We believe that BuildEvents.today has the potential to revolutionise the service industry, but we should set realistic goals and build the most appropriate product for each step of the way. Furthermore, Felix has a certain degree of tech literacy, but he lacked the understanding of how to tie the different technologies together. Thus some of the third party APIs and features that he suggested were not feasible. It was up to us to decide what we can and should include in the product.

Google App Engine feels like a walk in the park, albeit very expensive. Although easily configured continuous deployments, I think App Engine cost doesn't outweigh the ease of use, as for the same price, I could've built my own Docker & Docker Compose with faster machines.

As in our usage, having 4 GAE services, with \$22/service/mo and 2 deployment costs us \$176 per mo.

We learned that the client needs to do deep query, hence modelling it using GraphQL would be easier. At first we think GraphQL will annoy the people working on the front end, we should've made a compromise by making the GraphQL engine, and create a wrapper of GraphQL and expose it to the front end people instead doing it pure REST. Basically reinventing Prisma.

10. Contributions and Acknowledgements

Name	Roles
Koh Chi Hao	Frontend, Documenter
Koh Jun Wei	Frontend, Backend, Documenter
Tan Long Bin	Frontend, Documenter
Jerrell Ezralemuel	Backend, DevOps, Documenter

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We would also like to thank Prof. Ben Leong for his guidance that helped us realise what is important in the final project and helping us succeed in the project.

11. Bitbucket

Kratos - Backend

Eunomia - Client web app

Landing - Landing page

Aphrodite - Admin web app

Submission - final report and poster