Description

From romantic dining experiences to front-row seats to our nation's best fireworks displays, The Wheel of Brisbane frequently hosts special events offering a unique perspective of our beautiful city to visitors and locals alike. This project aims to aid The Wheel of Brisbane in improving online ticket sales for such events by leveraging the good word of their many satisfied customers and by providing a modern, user-friendly event management system tailored to their specific needs. With the potential to service up to 252 guests in 42 gondolas twice an hour and the need to continue accommodating ticket sales at the gate, any remotely credible solution will require a sophisticated approach to modelling events, tickets, bookings and their numerous relationships. Some of the unique requirements of this event management system include:

- Events that span multiple days or weeks
- Events that occur at several times on one date
- Variable number of gondolas for each date/time slot (herein 'ticket') e.g.) Weekend dining events may only reserve 12 gondolas where fireworks events will reserve 42.
- Variable number of passengers permissible in one gondola (max 6) and
- Variable rates for different tickets to the same event

User stories

#1	As a guest I want a way to register for a customer account so that I can access features restricted from guests
Acceptance criteria:	

- A form should be available for guests to register.
- An **account** should be created and stored in the database
- a specific **user type** for **customers** should exist.
- a specific **user type** for **administrators** should exist.
- Each user type should inherit all of the properties and capabilities of an abstract user including **name**, **email**, **password** and contact **phone number.**
- Email address must be unique.
- The password must be encrypted.
- Only administrators can create new administrators.
- The website should be deployed with 1 administrator account pre-configured.

#2	As a user (of any type) I want a way to login so I can access the features appropriate to my level of privilege and authority on the website
Acceptance criteria:	

- All user types should be able to login with their stored email and password.
- Unauthorised users should be denied access to resources and redirected somewhere else with appropriate warnings

#3	As an **administrator** I want to create new **events** so I can keep the website up to date without needing to contact a web developer

Acceptance criteria:

- The create event page should be restricted to administrators only.
- The create event page should contain a form that requires the **name of the event**, a **description**, **category** and a **status.**
- The **status** should support the following states: upcoming, inactive, booked out and cancelled. Statuses are defined further in User Story #11
- Events should support multiple **tickets** per day over multiple days. Dates should, therefore, be omitted from events and tied to tickets instead.
- Administrators should be able to create events with or without releasing tickets. In the latter case, the event status should be inactive.

Go to Wireframe for this view

#4	As an **administrator** I want to release **tickets** for an event so that customers can purchase them online and guarantee themselves a spot on the wheel.

Acceptance criteria:

- Each ticket requires a **date and time**, **price** and number of **remaining gondolas**.
- Administrators should be able to specify how many gondolas to reserve for online sales when releasing tickets. *This is the initial value of remaining gondolas.* For some events, like New Year's Eve, this will be all 42 gondolas. For others, like dining events, walk in customers just wanting to ride the wheel should still be able to get a place on the wheel. Perhaps 12 Gondolas per date/time slot would suffice.
- Administrators should be able to release tickets *whilst* creating an event as described in User Story #3 as well as release *more* tickets for existing events as described in User Story #5.

#5	As an **administrator** I want to update existing **events** so I can make changes and/or release more tickets without needing to contact a web developer

Acceptance criteria:

- Only administrators should have access to the update events page.
- The update event page should use the same view as the create event page as it was described in User Story #3, but form fields should be prefilled with the current event information.
- Administrators should also be able to release more tickets for an event from this page at any time.

#6	As a user I want to view upcoming events on so that I can see what takes my fancy

Acceptance criteria:

- Upcoming events are those for which *future* tickets have been released. Whether the status is upcoming, booked out or cancelled. Past and inactive events are not included.
- This page should list, at least, the names of the events, their statuses, the date ranges for which tickets have been released and the starting price of those tickets. If screen real-estate permits, a truncated description of the event may be included.
- Administrators should see a "+ event" button on the upcoming events page.
- This should be the landing page/home page

Go to Wireframe for this view

#7	As a user I want to view upcoming events by category so that I can show only those that I am specifically looking for.

Acceptance criteria:

- Categories should filter the events page as it was described in User Story #6.
- Selecting a category should isolate events of that type, not remove them from the list. This may be achieved client or server side.
- Viewing several categories at once is out of scope.

#8	As a user I want to view a page that displays only the event I am interested in so I can read more about it and see if there are still tickets available

Acceptance criteria:

- Any user should be able to view single event pages.
- Single event pages should contain all available information about an event including the status and the range of dates for which tickets are available.
- Details about the different tickets are displayed elsewhere as described in User Story #9
- Single event pages should display reviews of the event as described in User Story #14.
- Registered customers should see a form to post reviews on single user pages where guests do not. The form is described further in User Story #13
- If the status is upcoming (future tickets are available), a 'book now' button should be displayed. This will take customers to a page where they can select tickets. Selecting tickets is described in User Story #9
- Administrators should see an "update" button on single event pages.

Go to Wireframe for this view

#9	As a **customer** I want to **book tickets** for events at The Wheel online, so I don't have to buy them at the ticket office and risk missing out

Acceptance criteria:
- Booking tickets should be limited to customers only.
- Customers must be logged in to book tickets.
- The book tickets page should include a list of the available tickets.
- If there are no remaining gondolas for a specific ticket, it should be greyed-out.
- Customers should be able to specify the number of passengers they wish to bring.
- If the number of passengers exceeds the maximum capacity for a gondola, an extra gondola should be added to the order automatically. Up to 6 people may ride in 1 gondola.
- Customers can add additional gondolas as they please. 6 passengers can reserve 3 or even 6 gondolas.
- Customers can then remove those additional gondolas, but they cannot reserve fewer gondolas than the maximum capacity allows.
- The quantity of the order is the number of gondolas the customer wishes to book. i.e) customers are charged per gondola, not per passenger.
- Each successful **booking** should reduce the remaining gondolas *of the selected ticket* by the quantity of the booking.
- Each time 'remaining gondolas' is updated, the application should check if the respective event is now booked out and update the status accordingly.
- Booking a ticket should generate an **order**
- Customers should be shown the orderID on successfully booking a ticket

Go to Wireframe for this view

#10	As a **customer** I want to **view** a page that shows **all** of my **orders** so I can present proof of my purchase at the wheel

Acceptance criteria:
- Customers should be able to view a page containing all of their past orders.
- Customers must be logged in to view their orders.
- Each order should show the date and time of the ticket, the quantity of tickets purchased and the total price of the order.
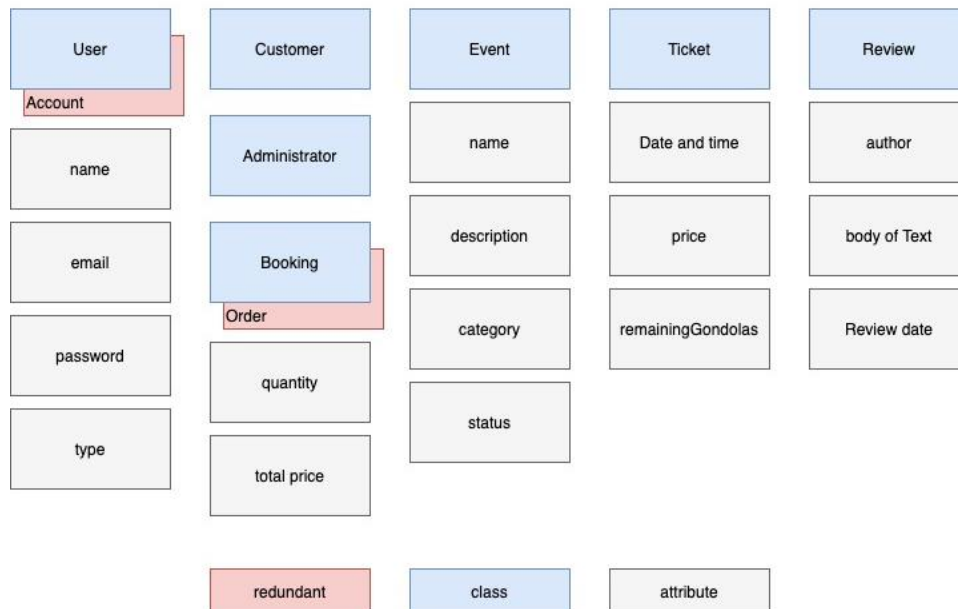
Go to Wireframe for this view

#11	As a user I want to see if events are booked out, so I know not to waste my time registering for an account with the website or sharing the event with others

Acceptance criteria:
- The status of an event should be shown on the upcoming events page as specified in User Story #6 and on single event pages as specified in User Story #8
- If an event is created without releasing tickets, the status should be 'inactive'.
- As *future* tickets are released for the event the status should be changed to 'upcoming'.
- Each booking reduces the number of remaining gondolas *for a ticket* as described in User Story #9
- When all future tickets for a given event have 0 remaining gondolas, the status of the event should change to 'booked out'.
- If all of the tickets are in the past, the event will return to 'inactive' as described in User Story #8
- The status will be 'cancelled' only if an administrator cancels an event via the update page defined in User Story #5.

#12	As a customer I want to be informed if I cannot book all of the tickets that I requested so I don't end up buying just 3 tickets for a group of 10 people or something.

Acceptance criteria:
- If a customer tries to buy a quantity of tickets that exceeds the total available, the order should fail with a warning and explanation. Server side.
- Include measures to prevent this in the first place (client side) as described in User Story #8. (Include a way to bypass this for marking/testing purposes).

#13	As a customer I want to post reviews for past events so that I can help others to make informed decisions about their booking

Acceptance criteria:
- Customers must be logged in to post reviews.
- The post review form should be a UI component, not a whole page/view.
- The form should include a **body of text**.
- The application should note the current **date** and userID of the **author** when submitting a review.

#14	As a user I want to view reviews by event so that I can make informed choices about the events I attend

Acceptance criteria:
- Reviews should be displayed on the respective single event page as specified in User Story #8
- Reviews should include the author's name, the review text and the date it was posted
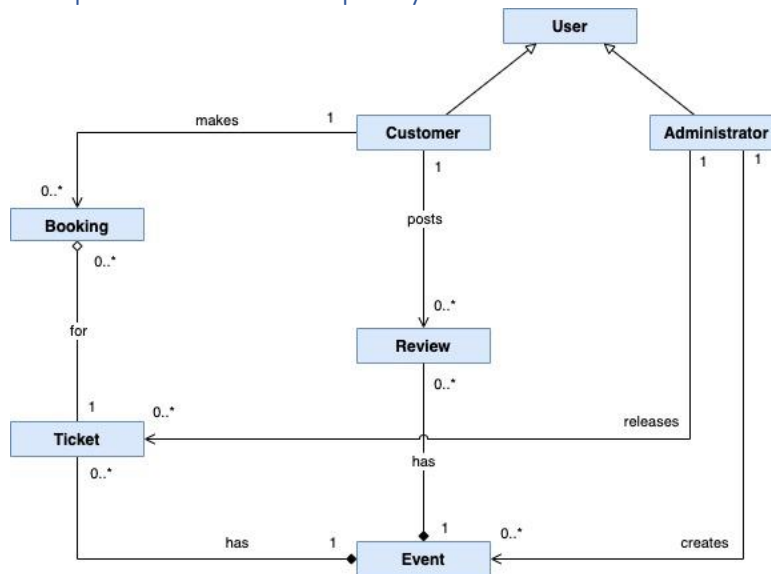- All users should be able to see reviews.

Conceptual Model

Identify concepts

Account	Password	Description	price	body of text
User type	Name	Category	remaining gondolas	Booking
User	Email	Status	Review	Order
Customer	Event	Ticket	date	quantity
Administrator	Name	date and time	author	price

Refine concepts

User	Customer	Event	Ticket	Review
Account				
name	Administrator	name	Date and time	author
email	Booking	description	price	body of Text
password	Order	category	remainingGondolas	Review date
type	quantity	status		
	total price			

redundant	class	attribute

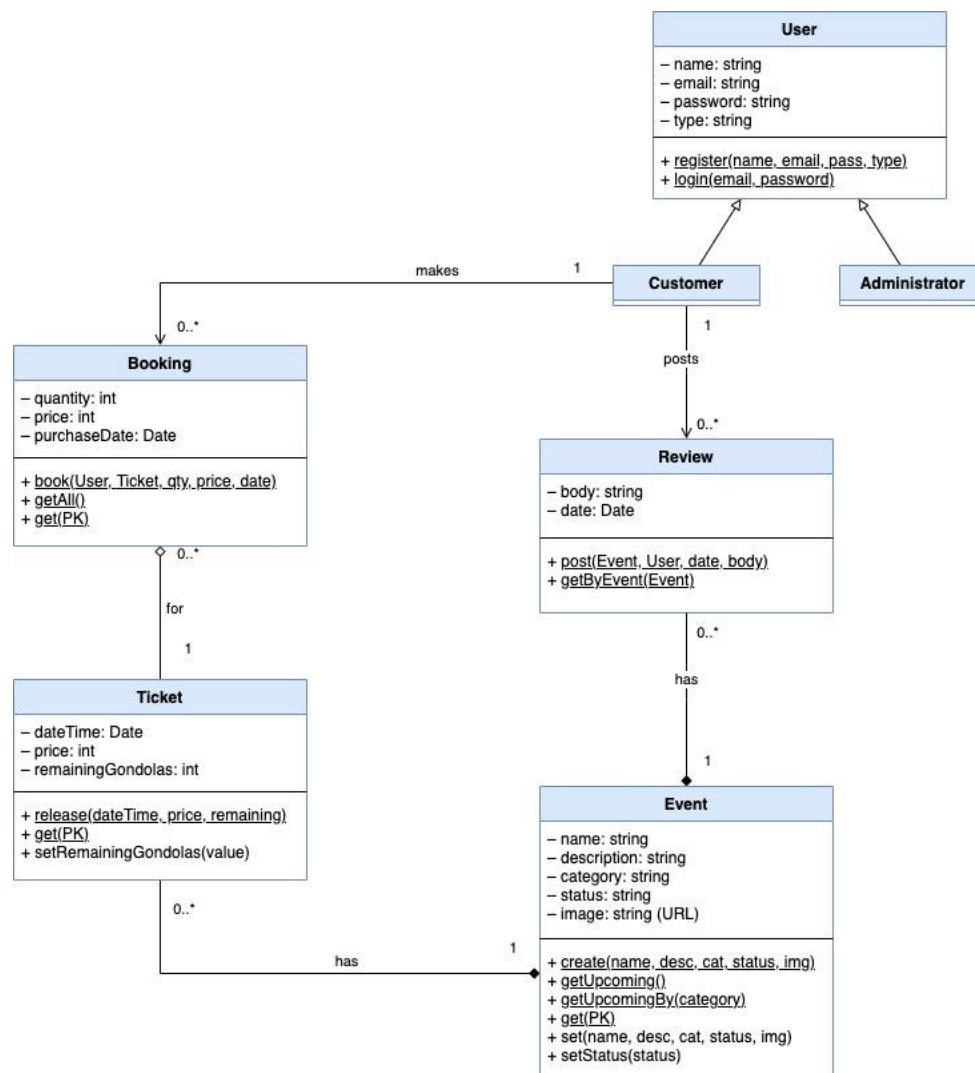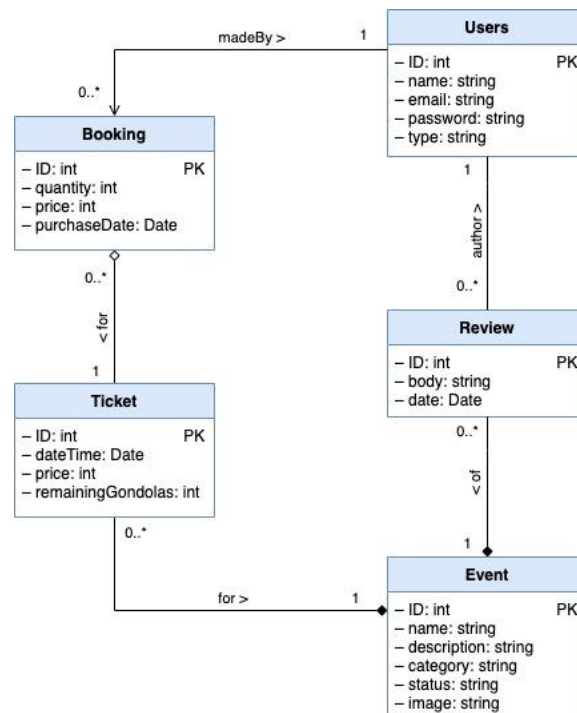## Establish relationships and define multiplicity

Include attributes and responsibilities and remove insignificant relationships

Data Model

Wireframes

My Orders

[Go to User Story for this view](#)

Landing page

hero image

the ride of your life...

Upcoming Events   + event   Categories ▼

blue UI items are only visible to administrators

a category

another one

a third category

a fourth

An event name
upcoming

From dd/mm/yyyy
Until dd/mm/yyyy
7pm-11pm

Maecenas euismod elit commodo nunc laor
vestibulum non vehicula vitae, scelerisque i
rutrum semper.

event image

Another event name
upcoming

From dd/mm/yyyy
Until dd/mm/yyyy
7pm-11pm   from $40

event image

A third event name
booked out

dd/mm/yyyy
8pm

from $40

event image

A fourth
cancelled

From dd/mm/yyyy
Until dd/mm/yyyy
7pm-11pm   from $40

event image

a footer   The Wheel of Brisbane events

Go to the User Story for this view

Upcoming Events   My Orders   **Login**
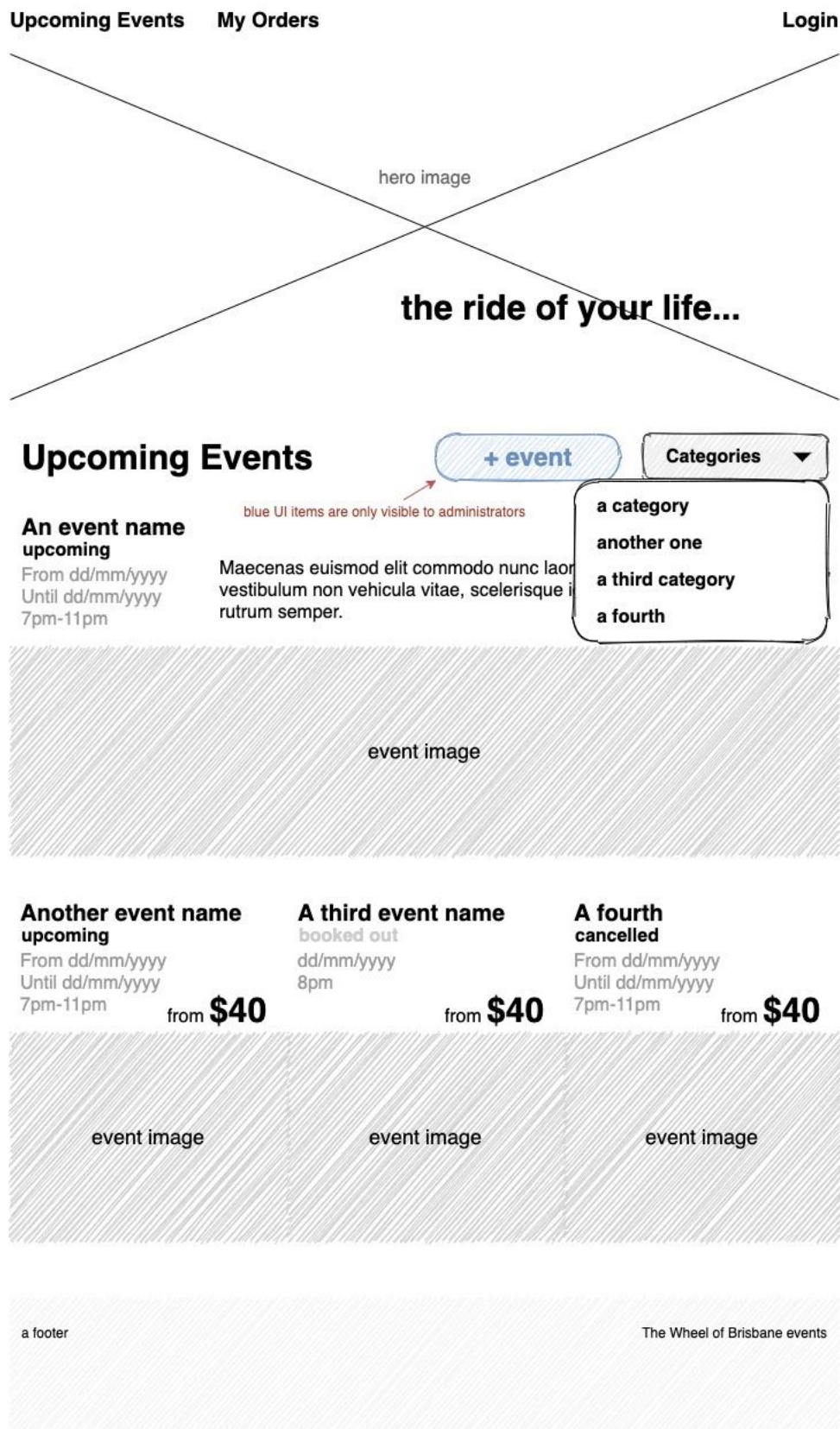
Create a new event

upload image

Event name   Category

Description

Add a description about the event...

Create event without releasing tickets ☐   inactive ▼   create

check the box to enable

Release tickets   Please specify the number of gondolas to reserve and the price

	8pm	9pm	10pm
30.7.21	# $	16 $60	8 $60	+
31.7.21	12 $60	✂ ✗	# $

empty date/time slot

add new date row with the existing times

Hover effect: edit or delete date/time slot

add new time column for each date

This even will be created with the following status: upcoming ▼   **create**

inactive
upcoming
booked out
cancelled

a footer   The Wheel of Brisbane events

[Go to the User Story for this view]

Upcoming Events   My Orders   **Login**

event image

blue UI items are only visible to administrators

The event name   update

Fusce venenatis consectetur dapibus. Duis nibh urna, lobortis et iaculis consequat, vestibulum at ex. Duis volutpat libero magna, eget lacinia sapien tristique id. Integer accumsan in nunc nec efficitur. Mauris lorem purus, lobortis eu risus sit amet, mollis ullamcorper urna. Nullam quis vehicula justo. In eu nisl sit amet justo gravida dignissim ac sit amet lorem. Aenean mollis felis odio, eget finibus mi laoreet a. Aenean nisi dui, consequat non dapibus at, auctor eu velit.

Dates and times   upcoming

from 30.07.21   from 7pm   book now
until 01.08.21   until 11pm

green UI items can only be actioned by registered customers

Reviews

yourname dd/mm/yyyy

Add a description about the event...   post review

name dd/mm/yyyy
Maecenas euismod elit commodo nunc laoreet auctor. Donec tellus massa, vestibulum non vehicula vitae, scelerisque id enim. Morbi hendrerit fermentum ligula, posuere volutpat massa mollis a. Pellentesque ultrices rutrum semper.

name dd/mm/yyyy
Maecenas euismod elit commodo nunc laoreet auctor. Donec tellus massa, vestibulum non vehicula vitae, scelerisque id enim. Morbi hendrerit fermentum ligula, posuere volutpat massa mollis a. Pellentesque ultrices rutrum semper.

a footer   The Wheel of Brisbane events

Go to the User Story for this view

Book tickets

event image

Dates and times

Prices listed are per gondola. max 6 people.

	7pm	8pm	9pm	10pm	11pm
30.7.21	$50	$50	$60	$60	$50
31.7.21	$50	$50	$60	$60	$50
1.8.21	$40	$40	$50	$50	$40

the order corresponds to the ticket selected above

Passengers and gondolas

Up to 6 people may ride together in 1 gondola. You may, however, reserve as many extra gondolas for your group as you please.

number of people   —   8   +   number of gondølas   —   2   +

$ 120.00   pay now

a footer   The Wheel of Brisbane events

Go to the User Story for this view