

Fullstack Challenge

Problem

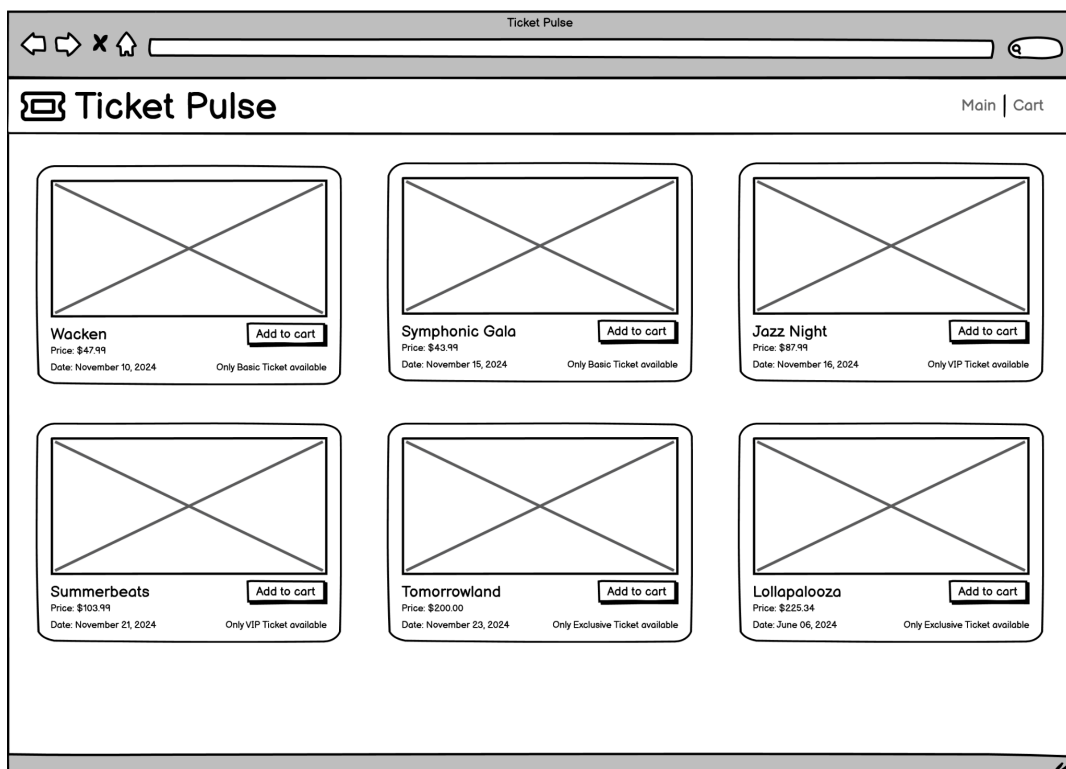
Welcome to the Ticket Pulse shop challenge. In our online shop, people can buy tickets for selected concerts that create unforgettable live experiences.

Your task is to build a simple online shop for concert tickets. The shop should be easy to navigate and provide a great user experience. Below are the key requirements for the challenge.

Requirements

Main Page:

- Display an overview of available concert tickets in a card layout (name, date, image, price)
- Each card can be put into the shopping cart by clicking the “Add to cart” button, page should not redirect to the cart page
- Each event supports only one type of tickets (Basic, VIP or Exclusive)



Shopping Cart Page:

- Display the tickets added to the cart along with their details (name, date, price, quantity)
- Event tickets can be removed from the cart by clicking on the “Remove” button. This will remove all tickets for a specific event (e.g. Wacken)
- The Quantity is placed in a dropdown and can be changed. Cart total should be recalculated immediately, as well as event price.
- Display the total amount to pay based on the number & price of the tickets in the cart

The screenshot displays the 'Ticket Pulse' shopping cart interface. At the top, the browser address bar shows 'Ticket Pulse'. The page header includes the 'Ticket Pulse' logo and navigation links for 'Main' and 'Cart'. The main content area is titled 'Your cart: 3 items'. It lists three items, each with a placeholder image (a box with an 'X'), the event name, date, ticket type, quantity dropdown, price, and a 'Remove' link. The items are: Wacken (Nov 10, 2024, Basic Ticket, \$47.99), Symphonic Gala (Nov 15, 2024, Basic Ticket, \$43.99), and Jazz Night (Nov 16, 2024, VIP Ticket, \$175.98). On the right side, a summary section shows the 'Subtotal' as \$267.96 and 'With delivery (free)' as \$267.96. Below this is a blue 'Check out' button and a message: 'Congrats - you get free delivery!'. The footer of the page contains a small logo.

Item	Quantity	Price	Total
Wacken November 10, 2024 Basic Ticket	1	\$47.99	\$267.96
Symphonic Gala November 15, 2024 Basic Ticket	1	\$43.99	
Jazz Night November 16, 2024 VIP Ticket	2	\$175.98	

Pricing

All of our tickets have a price that is dynamically calculated in relation to the concert date.

The following rules apply:

- Basic ticket
 - Base price starts at \$39.99
 - The price increases by:
 - +5% of the base price when there are 15 days or fewer but more than 10 days left
 - +10% of the base price when there are 10 days or fewer but more than 5 days left

- +20% of the base price when there are 5 days or fewer left
- Once the concert date has passed, the card can no longer be sold, and its price drops to 0
- VIP ticket
 - Base price starts at \$79.99
 - VIP tickets increase in price faster than basic tickets:
 - +10% of the base price when there are 15 days or fewer but more than 10 days left
 - +20% of the base price when there are 10 days or fewer but more than 5 days left.
 - +30% of the base price when there are 5 days or fewer left
 - Once the concert date has passed, the card can no longer be sold, and its price drops to 0
- Exclusive ticket
 - Base price starts at \$200.00
 - Its price does not change until the concert date
 - After the event, the card becomes a collector's item, and its price increases by 1.2% of the base price every day after the concert

General

- The pages should be linked together, allowing seamless navigation between them

Tickets

Make sure that at least the following tickets are available in the system (sample cart listed here):

Name	Concert	Quantity	Price
Basic Ticket - Country Thunder	In 17 days	1	\$39.99
Basic Ticket - Wacken	In 4 days	1	\$47.99
Basic Ticket - Symphonic Gala	In 9 days	1	\$43.99
VIP ticket - Jazz Night	In 14 days	2	\$175.98
VIP ticket - Summerbeats	In 1 day	4	\$415.96
Exclusive ticket - Tomorrowland	In 5 days	1	\$200
Exclusive ticket - Lollapalooza	10 days ago	2	\$450.68

		Total Sum	\$1374.59
--	--	------------------	------------------

What We're Looking For

- Make sure the requirements above are fulfilled and the system is working
- We expect that the solution is covered with tests
- Code should be clean & maintainable
- Reasonable database choice & database design

Technical Details

- PHP & Yii2 are already setup in the Github repository
- It's expected that React or Vue.js is used as a component library
- It's ok to use some UI component libraries (e.g. ChakraUI, MaterialUI etc.)
- Use a suitable database technology to store ticket information

Nice to have

- Frontend components are written in TypeScript
- Detailed Pull-Request description
- Add a section to the Pull-Request description with things that could be improved & next steps that you would apply to bring it to production
- Application can be run easily full functional with `docker-compose up` command as a Docker container