Bug report for Buggy Cars Rating application

This document reports the most critical bugs found in the application
https://buggy.justtestit.org/

1. **Cross browser compatibility is missing**

    The website is expected to work with the same behaviour across all the different browsers. But it is not the case here as the website is not able to launch model page and hence the user is not able to vote, and it breaks the basic functionality of this website
   This issue is observed in **Firefox (version 97.0.1) and Safari(version 14.1.2)** browsers
   Steps to reproduce:

    - Launch the web application using Firefox or Safari browser.
    - Click on Popular Car Model and you will see the application keeps spinning around without loading any details
    - Overall rating page -> click on car model also same issue is observed

    Screenshots attached for reference:
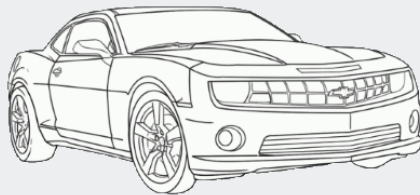   From Mozilla Firefox browser
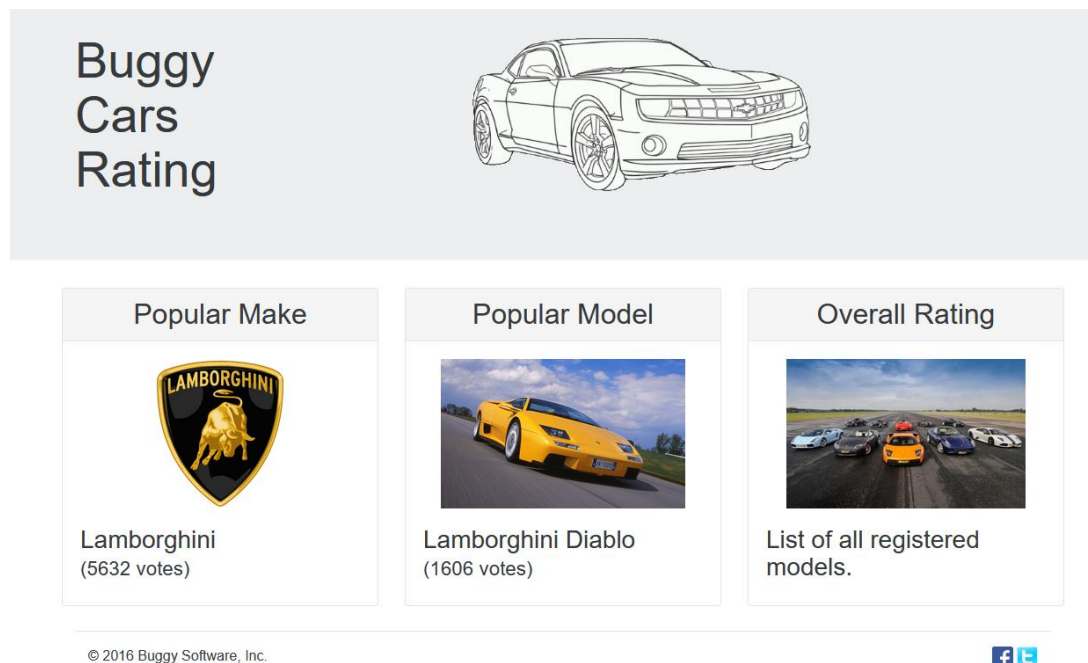
    Model page not loading when I click on Popular Model. See the blue round image keeps loading

Buggy Rating

Login | Login | Register

Buggy
Cars
Rating

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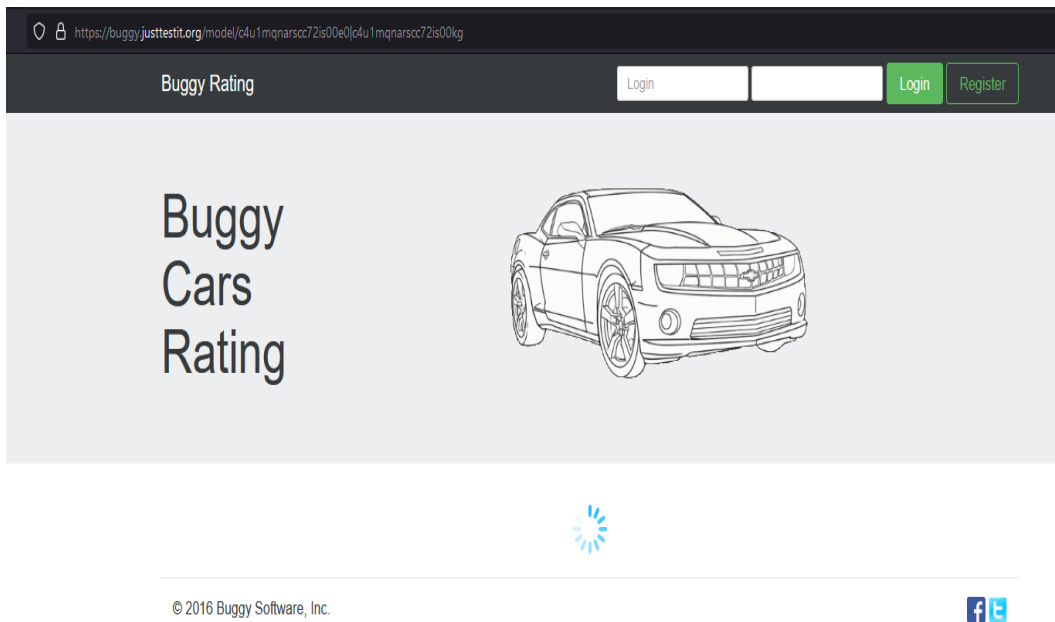
Trying to click Model from Overall rating page and same issue is observed as above

Buggy
Cars
Rating

	Make	Model	Rank	Votes	Engine	Comments
	Lamborghini	Diablo	1	1606	6.0l	Voted by testUser1645583103 Voted by testUser1645581028 asd View more
	Alfa Romeo	Guilia Quadrifoglio	2	1591	2.9l	bueno Tester2022 vbvv View more
	Pagani	Zonda	3	871	6.0l	test vote Tester2022 Hola View more

2. Improper ranking calculations

Ranking is mainly determined by the number of votes in the application as there are no other evaluating parameters like performance, fuel economy, cost efficiency of the cars.
As you can see in the below screenshot *Lamborghini Diablo and Alfa Romeo Guilia Quadrifoglio* are not ranked properly even though the votes are equal (1591).
At a first look it gives the impression that ranking is done based on Car Make or the engine capacity. However, this logic doesn't hold true for *Pagani Zonda and Lancia Rally 037* which has the same number of votes (871)
So, this confirms the overall rating calculation is misleading and needs correction.

	Make	Model	Rank	Votes	Engine	Comments
	Alfa Romeo	Guilia Quadrifoglio	1	1591	2.9l	bueno Tester2022 vbvvv View more
	Lamborghini	Diablo	2	1591	6.0l	Tester2022 Lovely car Very nice car View more
	Pagani	Zonda	3	871	6.0l	test vote Tester2022 Hola View more
	Lancia	Rally 037	4	871	2.0l	$$$$$$3489 Prueba rakesh est View more
	Lamborghini	Murciélago	5	681	6.5l	Lovely carl Prueba123

Steps to reproduce the issue:
There could be multiple ways to get the application to this state with equal number of votes. I used a custom java implementation and automated user creation and voting

1. Analyzed API calls for customer registration and registered 850+ users using https://k51qryqov3.execute-api.ap-southeast-2.amazonaws.com/prod/users API
2. Log in and vote for car models for *Alfa Romeo Guilia Quadrifoglio and Lancia Rally 037* using https://k51qryqov3.execute-api.ap-southeast-2.amazonaws.com/prod/oauth/token and https://k51qryqov3.execute-api.ap-southeast-2.amazonaws.com/prod/models/{carModelId}/vote API's

3. Pagination is missing for car model page

On navigation to car model page(https://buggy.justtestit.org/model/c4u1mqnarscc72is00e0%7Cc4u1mqnarscc72is00kg) system retrieves all the review comments in a single API call without pagination. This will be a severe performance impact with data growth and could possibly bring down the system

when too many concurrent users look at the car model page. The usability for this page is compromised as well.

> Steps to reproduce:
- Go to home page.
- Click on popular car model
- You will be taken to car model details page where you can see a big list of comments and a very long scroll.

4. Customer Identity Management – Account Verification

Currently the application allows anyone to register with any arbitrary details and login and vote. Ideally only legitimate account verified customers using email or OPT or any other means should be able to login and vote.

Otherwise, the overall statistics will be of no value to the end users. This whole account verification flow is missing in customer identity management part of the system. Also, there is no mechanism implemented in the system if the user forgets the password. Not sure if this is intentionally left out for the test web application.

Apart from these bugs there are numerous errors in the application which includes

- UX navigation error – Home Page -> Popular Car Make page -> Click on Buggy Rating header (the link is broken)
- UX navigation error – Home Page -> Overall rating page-> paginating beyond 5 pages is allowed and come to first page only by giving page number as 0 and press enter
- Usability error – Username and password fields are not clear though can be inferred
- UX design error – Home Page -> Overall rating page - > There are options available for sorting, but it is not very clear in UI. Also sorting by rank doesn't work properly
- UX design error – Login -> Profile -> FirstName and Gender should not be editable once a value is entered

These errors are not marked as critical because they don't affect the core business flows. The customer has some workaround to live with this. Although some of these are high priority errors.