MyCaraOne project tests

The project was tested both manually and using Unittest.

The manual tests showed most of the rendering issues:

* Layout, syntax issues, where the app was not scaling properly
* Where the user input was not allowed or required where not necessary
* All links has been tested thoroughly and the testing showed both minor and major issues:
  + Forms submission with dates and datetime format
  + Min and default value set/not set and this caused issues or was inconvenient
  + Django templating tags were in wrong order and this caused rendering scripts or content 2 times or in the wrong order
  + As using both BS4 and 5 this caused trouble with the navbar toggle not working unless set back to the bs4 one
* Major issue:
  + During testing the checkout process it turned out to have an issue with submitting the form when no billing address was created for user
    - Got 400 when tried to call the cache-checkout-data
    - Stripe card and other errors did not show and the form could be submitted without adding card details
    - Got a We cannot process your payment error
    - Or got 500 error but not from the webhook handler error handling
    - The booking did not even got to the POST part in the checkout view
  + If the user had billing address, the form could be submitted even if the form was edited before but something went wrong if the form was empty on page rendering
  + Tried to ignore cache checkout data, webhooks, however this issue was persistent
  + Tried rewrite the checkout page and also changing context to handle missing billing address in a different way
  + Tried to create dummy billing address instance but did not resolve the issue

Workaround was created by adding a checkout address view and render that one if no billing address was created by the user

At the moment if user has no billing address they redirected first to add one and then they can get to the payment and card page.

Bugs waiting for resolution:

* A superuser could be created without profile, and this crashed the whole app until from the admin panel one was manually created.
* If the language set in the browser to some languages where the date format is different then the default set on the site, this can cause (but only sometimes) issues from the book this motorhome page when trying to access the checkout page.
* Stripe card vanish form the checkout page, this is unfortunately unresolved, not really sure what causing this issue. Checked jQuery import position, tried different BS imports too. Also tried both wrapping and not wrapping around the env vars with ‘ or “ and also added them from CLI and console too. This is an intermittent issue, probably cookies can cause too, not yet found the solution. Spent hours on this and rewritten javascript code and cache/wh methods too.

Unittest was used to test the app and view urls resolved by Django and also where there is a redirect. This also showed the issue when accessing the index page from the index view the contact form were not working however the contact us view did. This was a design issue as these two views/templates are the same and so one of them could be removed.

Unfortunately, have not discovered and used automatic tests for complex views and model evaluation. I believe this is quite downside of this project.

All together the app was truly tested and challenged and where crashed the issue was resolved or in progress.

Html validation:

<https://validator.w3.org/nu/?doc=http%3A%2F%2Fmycaraone.herokuapp.com%2F>

CSS validation:

https://jigsaw.w3.org/css-validator/validator?uri=mycaraone.herokuapp.com&profile=css3svg&usermedium=all&warning=1&vextwarning=&lang=en

The application was tested on the following:

Web browsers:

Firefox 85.0.2 (64-bit)

Google chromeVersion 88.0.4324.150 (Official Build) (x86\_64)

Safari Version 14.0.3 (16610.4.3.1.4)

Both chrome and firefox works well, however Safari does not render nicely the motorhomes list view

Seems that there is an issue using the BS5 card CSS.

On android mobiles this works fine while not even third-party browser shows correctly the motorhome list view on ios

Other views rendered nicely on all platforms