Doctor-Patient

Prototype Phase

Team Members

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Important Links

1. Generate doc link to google document
2. UX google docs folder Prototype
3. Live site at doctor-patient UX

Tools

- Tools Used: HTML, CSS, Javascript, Bootstrap

- Benefits

  1. Effective
  2. Easy to build
  3. Good visualization
  4. Mobile responsive
  5. Web-ready
  6. Scalable
  7. Easy to edit

Roles

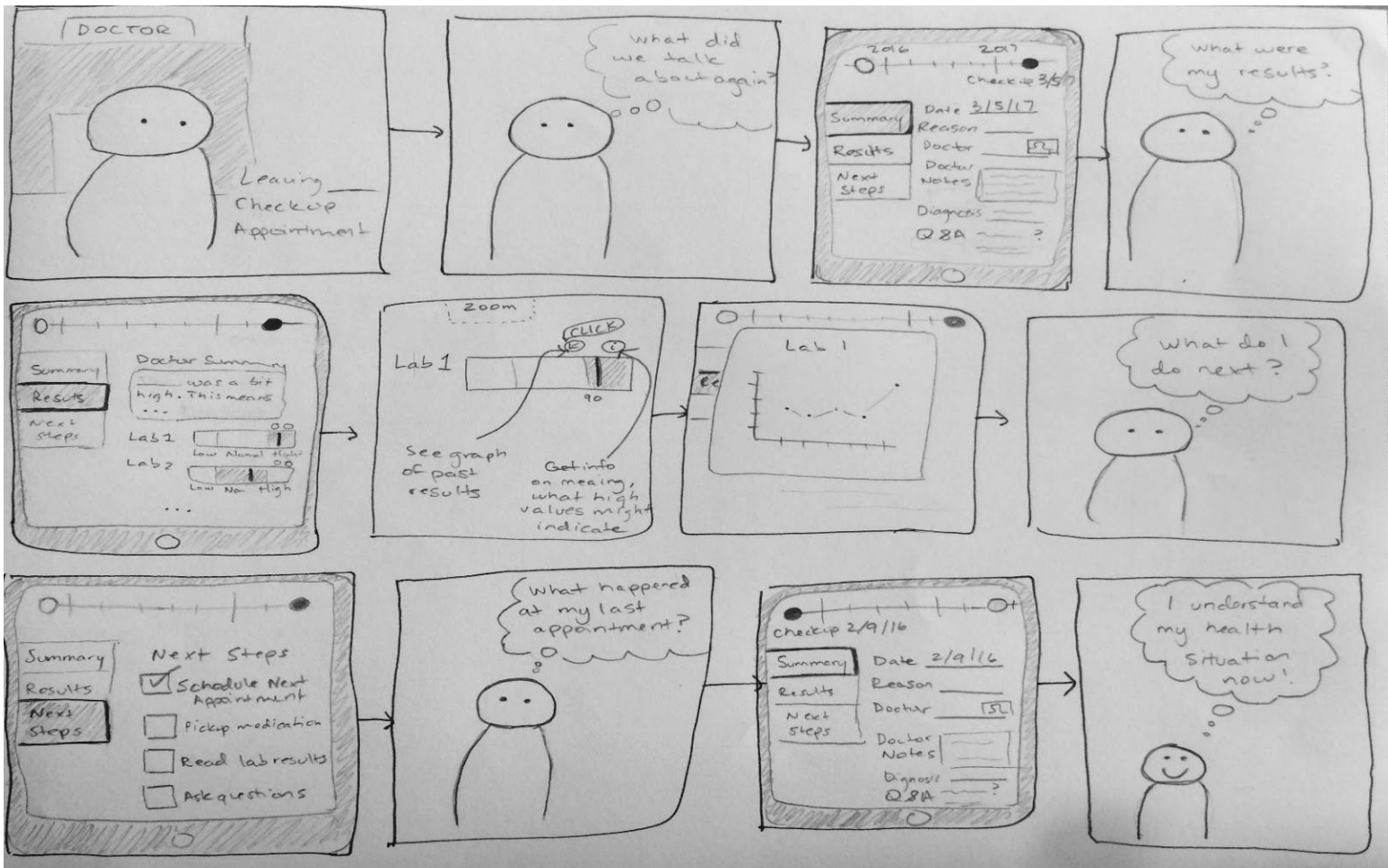We divided work and merged branches for prototype building

Tool: Github

Roles:

1. Storyboard realization: Mei
2. Git provision: Katie
3. UI development: Raghav, Katie, Vinay
4. UI issues fixing: Raghav, Katie, Akanksha,Vinay, Pranav
5. Github issues closure: Raghav, Akanksha, Vinay, Pranav, Katie
6. UI improvement suggestions (within peer): Mei, Akanksha
7. Prototype Documentation: Pranav, Akanksha
8. Deployment to github.io: Raghav

Prototype

Here we realized the storyboard using our tool html-css.
Please find storyboard below. We decided to improve the UX of doctor's appointment history.

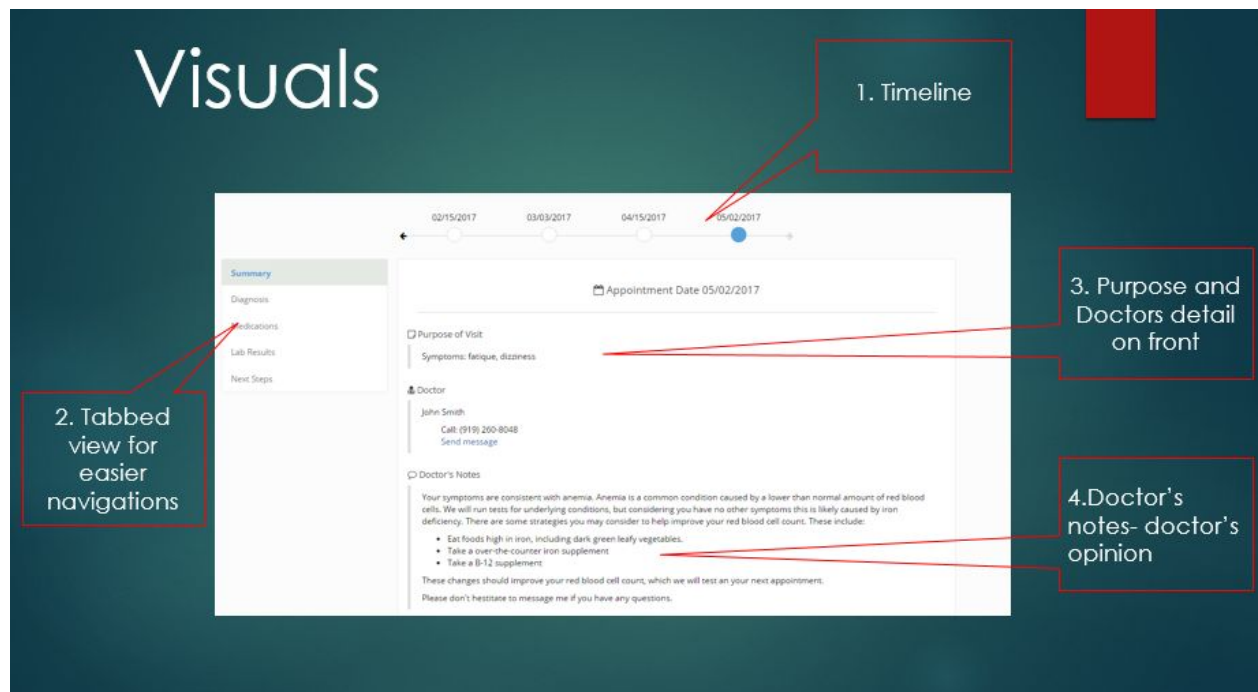Storyboard:

UX development stages:

1. HTML Page creation
2. Applying CSS for design and better visualization
3. Javascript for annotations and navigations
4. Mobile/ Tablet responsiveness using bootstrap
5. Web provisioning to live URL

Concentrations:

1. Timeline
2. Tabbed view for easier navigations
3. Purpose and Doctors detail on front
4. Doctor's notes- doctor's opinion
5. My notes- patient's notes
6. My Questions- patient's questions

7. Tab for diagnosis and FAQs
8. Tab for Medications if any
9. Interactive lab results
10. Doctor's annotation for lab results
11. Graphical history for lab
12. Next steps

Let's see these concentrations in depth:

1. **Timeline**
   This element represents visual of navigable timeline with appointment dates of patient as the nodes.
   It also has previous and next navigations so that one can easily navigate to appointments and see appointment history and by clicking on nodes (dates) on appointment history, one can see the details of appointment.
   + Easy navigations
   + Better visualization
   + Realize the appointment frequency easily

2. **Tabbed view for easier navigations**
   There are many annotations for appointment in terms of diagnosis, lab results, medications. So here having tabs will be better instead of displaying everything on the very same page.

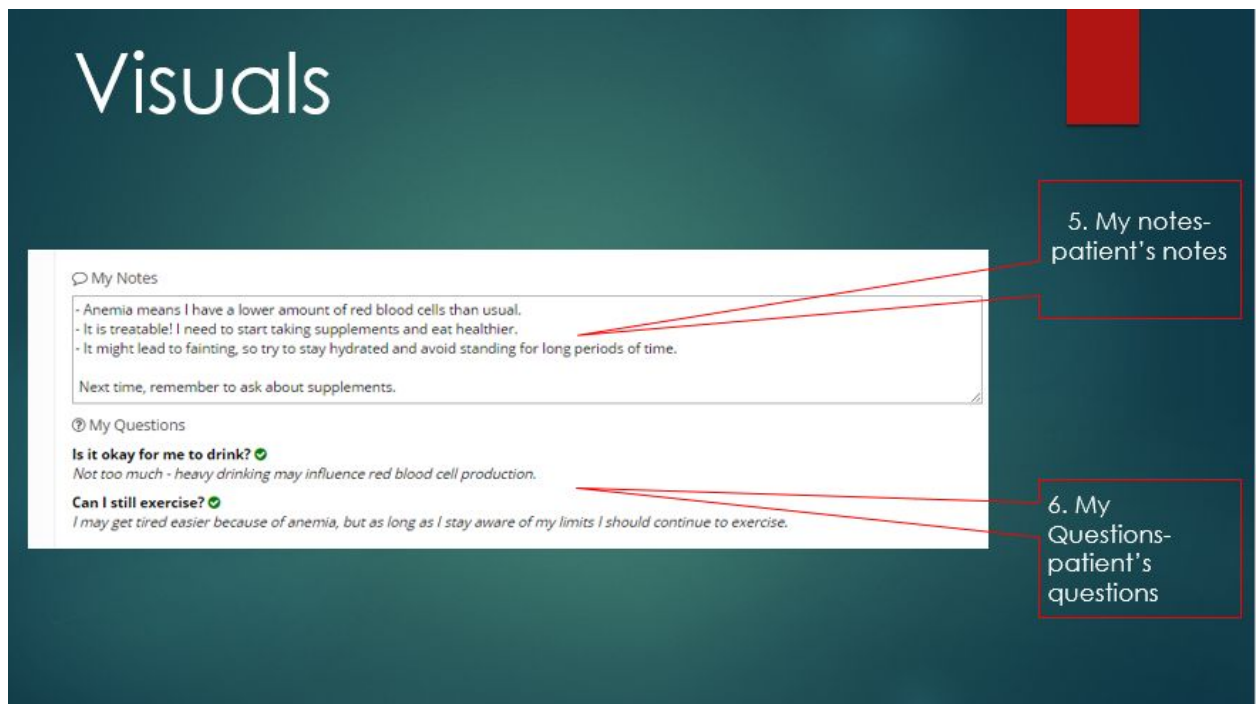## 3. Purpose and Doctors details on front

Many-times we look at appointment summary and we can't derive the summary of visit or purpose of visit. So this improvement will be beneficial to see actual purpose very easily.

4. Doctor's notes- doctor's opinion

It will summarize the special notes by doctor. E.g. Important findings or some observations which would be beneficial according to the medical state of the patient.
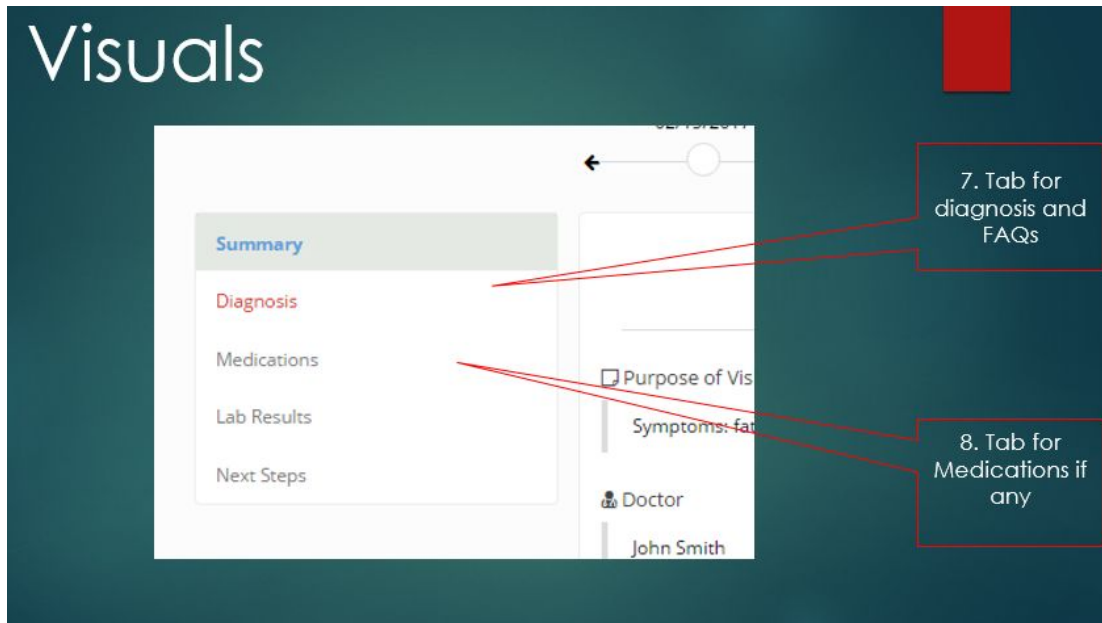
5. My notes- patient's notes

Many-times patient forget what doctor might have suggested or guided. So this section would act as diary for patient to note down some important points in the meeting.

6. My Questions- patient's questions

Sometimes patient feel to ask some questions and get answers and forget afterwards, so one can use this feature to list down the question she has for doctor and can also write down the answers of them too.

7. Tab for diagnosis and FAQs
There are many annotations for appointment in terms of diagnosis, lab results, medications. So here having tabs will be better instead of displaying everything on the very same page.
Diagnosis tab will list the basic details of diagnosed disease/ illness. It will also contain the FAQs about that illness.

8. Tab for Medications if any
There are many annotations for appointment in terms of diagnosis, lab results, medications. So here having tabs will be better instead of displaying everything on the very same page.
It is better to have a separate medications tab which will have details of those medicines with frequency and side effects of any.
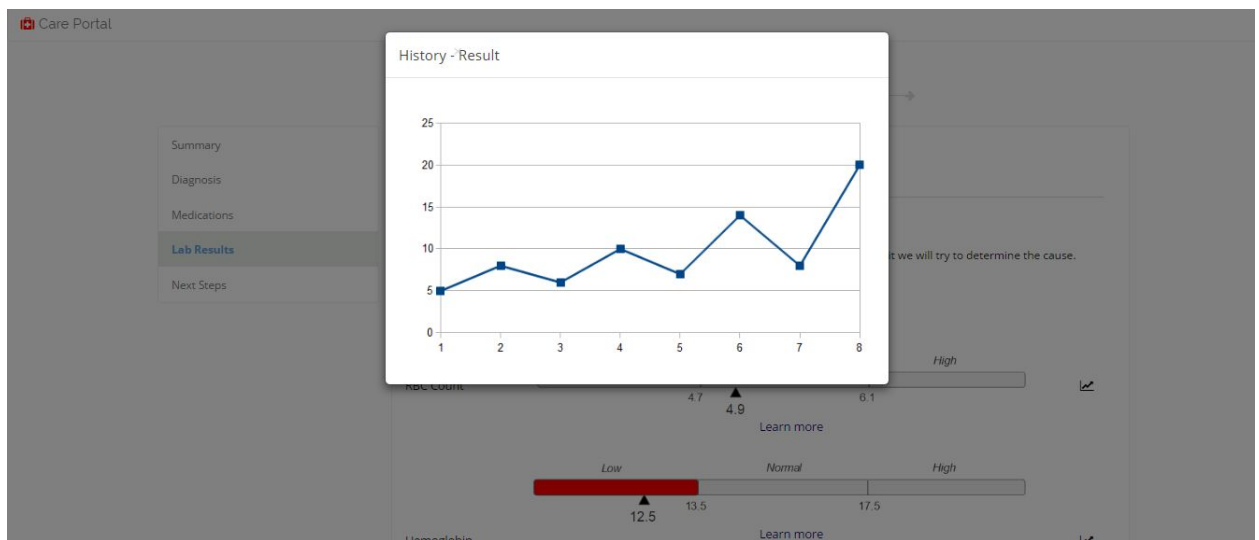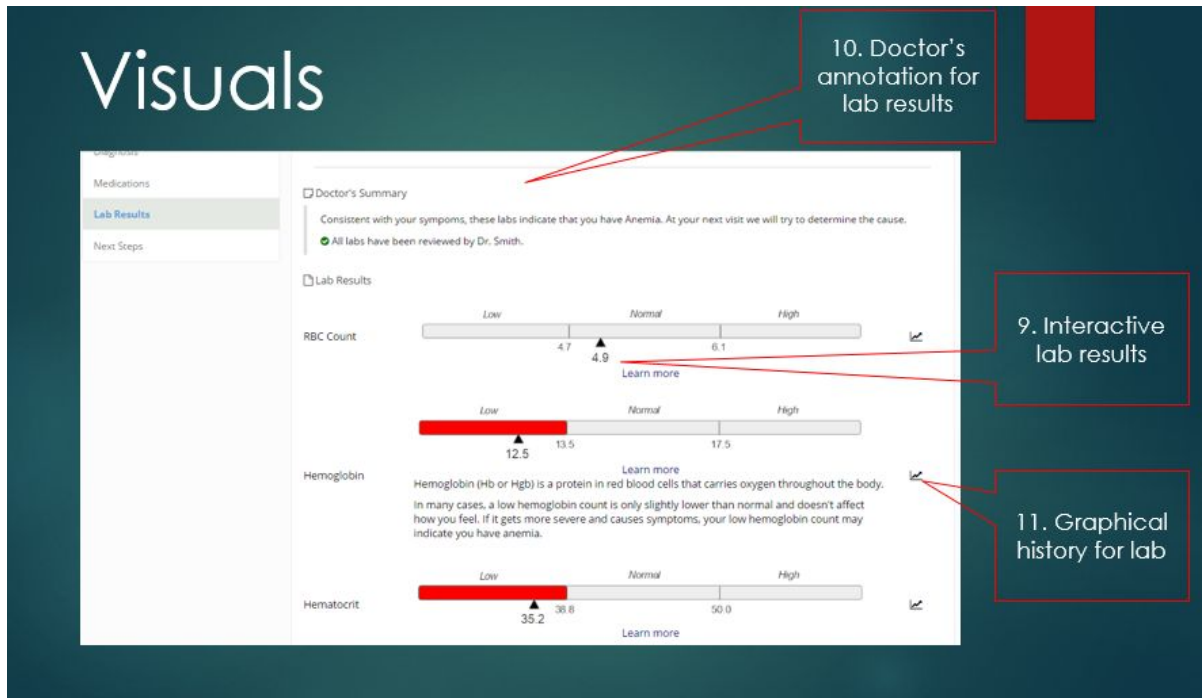
9. Interactive lab results
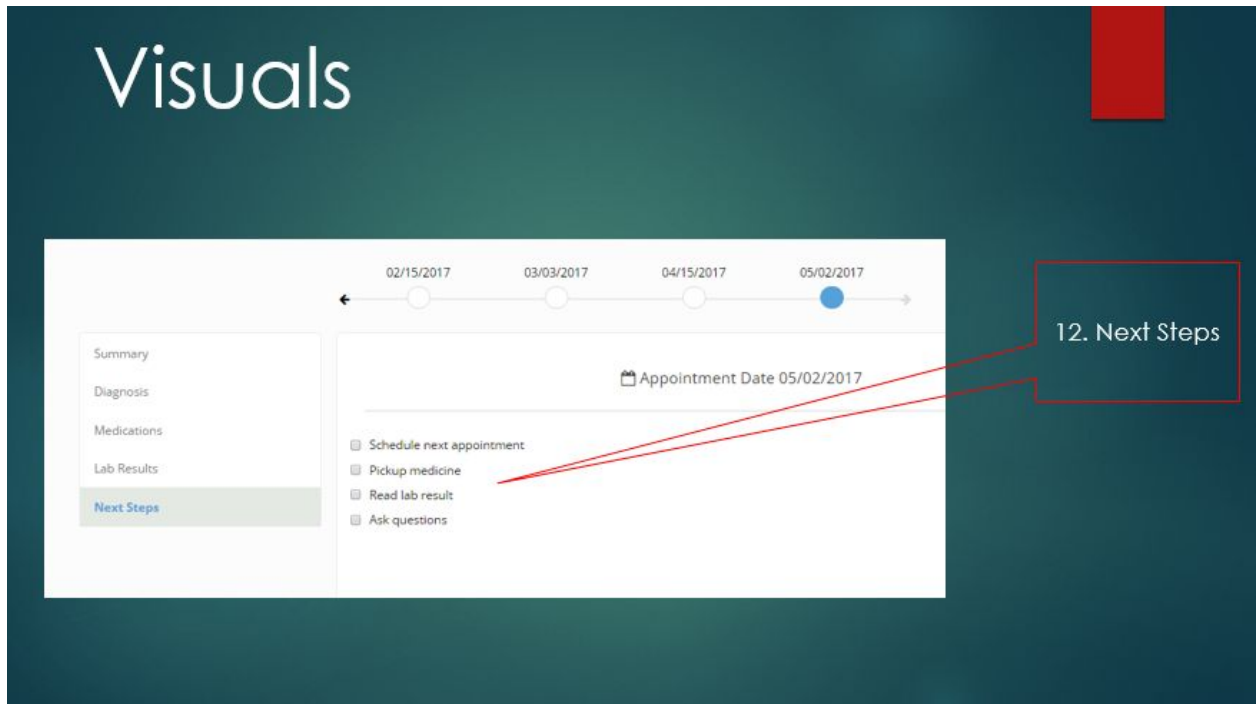**10.   Doctor's annotation for lab results**
11.   Graphical history for lab
These features would enhance the experience of the users to visualize the interpretation of lab results.
It will also have history of lab results and aggregation of it in form of graphs. E.g. One could see the trends or patterns through that.

12. Next steps

These will include
- Schedule next appointment
  Quick-link for scheduling next appointment

- Pickup medicine
  Quick-link for details where one could find the medicines and navigation to pharmacy website for order.

- Read lab result
  Enhanced interpretation of lab results

- Ask questions
  This section will be dedicated for asking missed questions for doctor. Suppose patient goes home and realizes that she forgot to ask some questions, she can continue with this feature and get answers from doctor.

Live URL: https://mrnayak.github.io/#

Trial

Problems during prototyping and trial:

1. Merge Issues
2. Replication issue
3. Javascript page load fixing
4. Visualization bias
5. Functionality bias

Problems during trial run:

1. Website was not hosted earlier so it was big task to git pull every-time and see UX elements on local system.
2. Raghav fixed it by deploying on mrnayak.github.io
3. Another issue was with tabs and bootstrap- javascript actions. Fixed it by root-cause-analysis through debugging the problem.

References

- UX notes by Dr. Watson
- Suggestions by Allscripts team
- Suggestions by Dr. Watson
- W3 Schools
- Bootstrap css