Project Summary

# Meeting the specifications

# General HTML/CSS

* Home Page (​index.html​) has a layout using header, main, footer, id, and classes. The page has a clear title and purpose and provides general information about the website.
* Navigation Bar has links to all pages on the site and is included at the same position across the website.
* 4 Other Pages (About Us, Contact Us, Get Started, Sign Up) have actual content, functional links and images, and share a consistent look-and-feel.

## Interactivity

* ​2 jQuery plugins:
  + jQuery Validation is used in pages Sign Up (signup.html), Contact Us (contact-us.html), and login poup (login.html)
  + Tooltipster is used in page Sign Up (signup.html)
* ​1 jQuery-UI widget
  + Accordion – is used in page About Us (about-us.html)
* JavaScript is used to load header (including the navigation bar) and footer, handle form events, display/ hide login popup, send AJAX requests and handle responses.

## Ajax

​ 2 AJAX requests:

* To a data file (zip.json – contains zip codes in Charlotte) in page Get Started (get-started.html)
* To an external website (wy.zybooks.com/weather.php – weather forecast information) in page Get Started (get-started.html)

**Note:** wy.zybooks.com/weather.php returns the same content regardless of the zip code query strings submitted. To confirm the success of an AJAX request and response, please refer to Console log while sending requests.

## Code Style

* Separation of concerns:
  + Page structures and static content are described in HTML files
  + All customized formatting is defined in a CSS file (styles.css) with the same layout and color palette across all pages
  + Events and dynamic content are handled in a JavaScript file (scripts.js)
* Code properly documented and formatted

# Feedback and justifications

The website layout was inconsistent and inefficient at the beginning of the project, with the header and navigation bar working in some pages and unusable in some others. This was due to several minor changes made while developing one web page to another without properly updating the site’s common layout and content. As a solution to this inconsistency, common structures are refactored into separate HTML files. They are then appended to DOM using jQuery after the main web pages load.

Initially, the AJAX request made to another website was meant to retrieve information about bicycling routes in Charlotte. However, most websites that have such information also enforce the same-origin security policy. Consequently, the request would be sent to wy.zybooks.com which allow cross-origin resource sharing. The response content – weather forecast information – can be useful given that the website aims to encourage bicycling – an outdoor activity.

# Conclusion

How the application meets stakeholder's needs: This website was created to encourage bicycling among UNC Charlotte students and faculty. The initial goals were to provide a place where users can explore bicycling routes in the area and create new ones, as well as provide helpful information about traffic laws, gears and accessories etc. The current version of the website meets the baseline needs and purposes. It has many opportunities for development.

Going forward: More functions and features should be added (e.g. session cookies to allow user login, server-side programming to handle read/write to database, responsive layout for handheld devices, etc.) to increase interactivity and provide a better user experience.