

# FRESHLINKER SYLLABUS DATA SCIENCE

This data science course is a practical introduction to the field of data science, which is at the *intersection of computer science*, *statistics*, *and business*. You will learn how to use large dataset to make critical decisions confidently. This course was created for *analysts*, *product managers*, *markets* and generally anyone else looking to learn the essentials of data analysis. You will also practice communicating your results and insights. By the end of the course, students will be able to:

- Use Excel, SQL and Python to collect, clean, and analyze large datasets.
- · Build and improve models to predict patterns from datasets.
- Communicate data driven insights to both technical and nontechnical audience.

### WHO SHOULD ATTEND?

Managers: Enable managers to make more data driven plans, for example in enterprise resource planning.

<u>Sales Managers</u>: Enable sales managers to identify potential sales opportunities and develop customized sales strategies.

<u>Digital Marketers</u>: Enable digital marketers to segment potential clients and develop targeted email or social media campaigns.

**Data Analysts**: Solidify their data analysis skills and become an expert on the best practice data analysis tools.

**Finance Professionals**: Enable finance professionals to enhance their technical and quantitative skills to welcome the Fintech revolution.

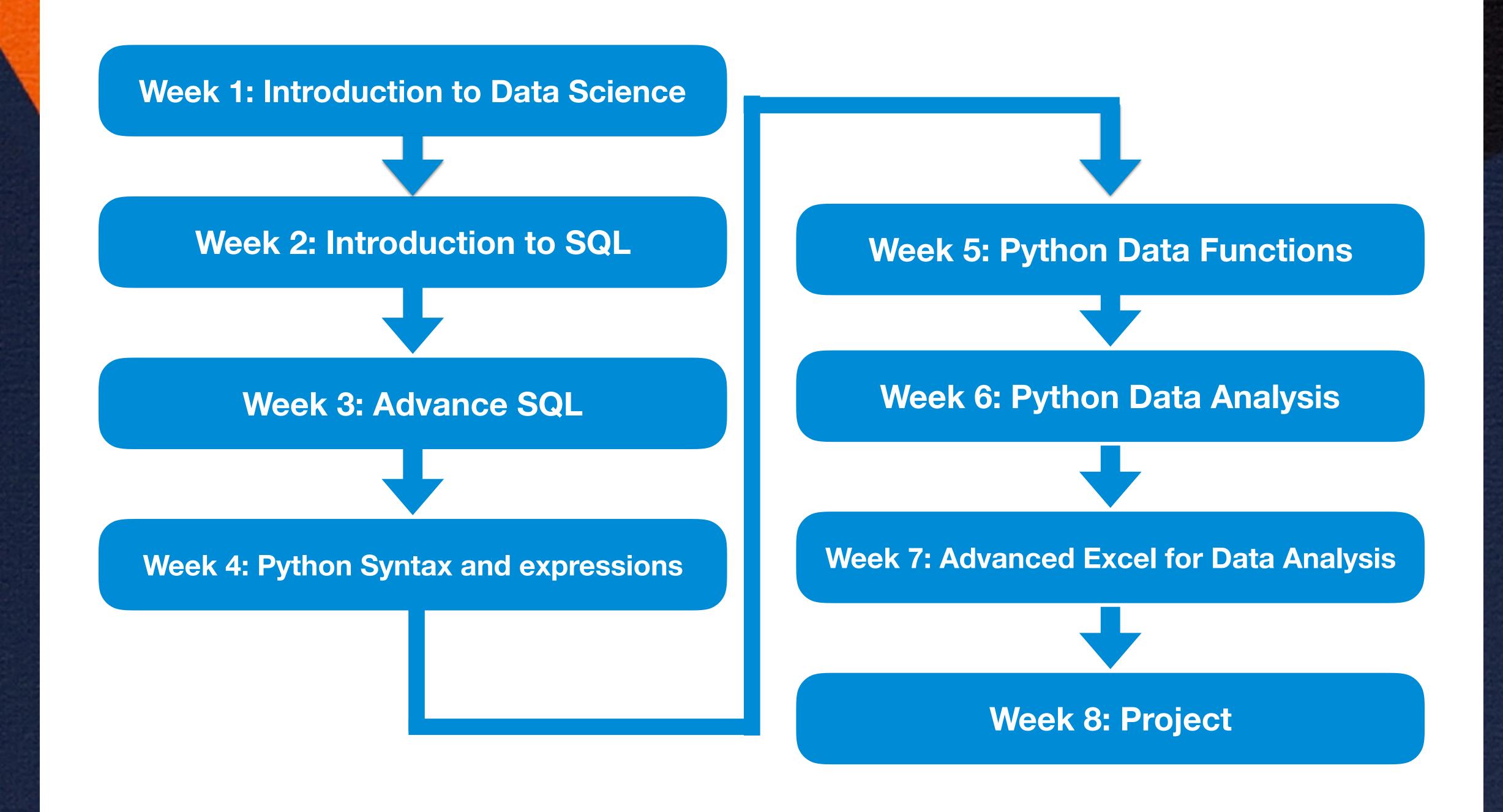
<u>Students</u>: Provides 8 weeks of hands-on practice doing industry-leading data analysis using Excel, SQL and Python.

For the Data Science final project, you will collect, clean and analyze a data set to solve a real-world problem. You will obtain a real-world data set, form a hypothesis about it, clean, parse, and apply modeling techniques and data analysis principles to ultimately create a predictive model.

Students present their results and each write a report that includes the following:

- Clearly articulated a problem statement
- Summary of data acquisition, cleaning, and parsing stage
- Clear presentation of your predictive model and the processes you took to create it
- Presentation style appropriate to both technical and non technical audience alike

As you complete stages of your final project, you will be required to present materials and receive feedback from your instructional team, classmates as well as industry experts.



#### I. WHY IS THIS COURSE USEFUL?

It is apparent that data is now a vital part of every business. That being said, to be successful in today's competitive landscape, businesses could be making more *data driven decisions* if this vast amount of data was more deeply analyzed through the use of data science. This data science course provides the *tools, methods, and best practices* to enable you to make accurate predictions about data, which ultimately leads to making better decisions.

# II. WHAT PRACTICAL SKILL SETS CAN I EXPECT TO HAVE UPON COMPLETION OF THE COURSE?

This course will *teach you how to use large data sets to make decisions*. Using Excel, SQL and Python, you will learn how to collect, clean and analyze data from multiple sources including the web, a local file and a relational database. You will be equipped with *technical skills in algorithms and data modeling* which allow you to make accurate predictions about your data.

#### III. WILL THERE ANY PRE-WORK?

Yes, there will be approximately 5 hours of pre-work to get you ready for the course.

#### IV. WHAT DO I NEED?

Please come prepared with laptop equipped with Microsoft excel.

# TALK TO US



#### FRESHLINKER SYLLABUS

Full Stack Web Development: Web Development + PHP + PHP-Advance

This web development course equips students the skills of programming for the web using HTML, CSS and JavaScript. You will also learn *a set of intermediate development skills using JavaScript, jQuery, PHP and MySQL*. You'll gain an understanding of how the web works and customize your sites using your own designs and ideas. By the end of this course, students should be able to:

- Explain how the web works
- Create the structure and style of a website using HTML and CSS
- Apply interactivity to a site using programming fundamentals in JavaScript
- Know the technical vocabulary to communicate with web developers.
- How to build a modern application using common design patterns.

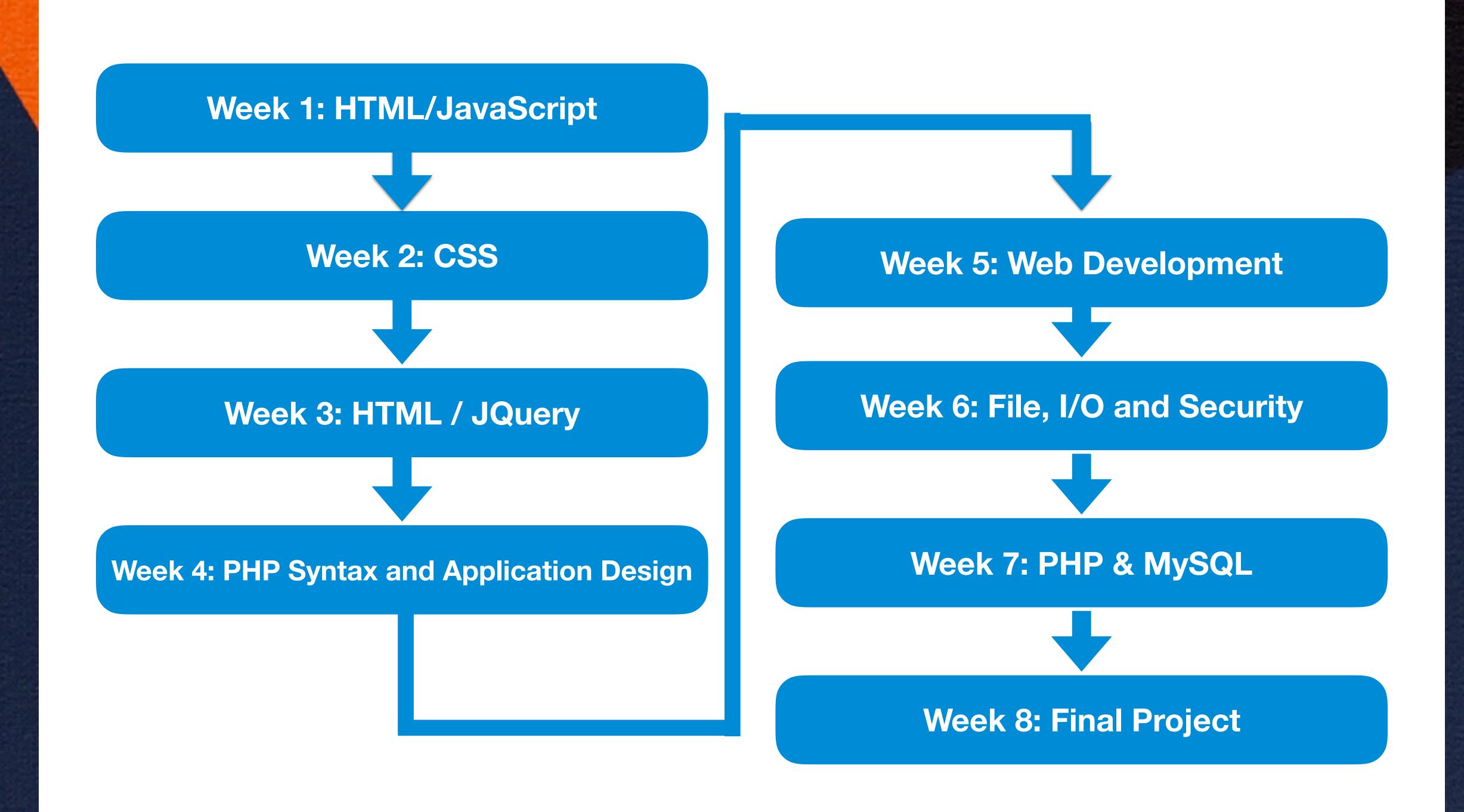
### WHO SHOULD ATTEND?

Individuals taking this course come from many different backgrounds, from *entrepreneurs, career changers, back-end developers and students*.

The final project is to *design and build a website* of your choice using HTML/CSS, PHP and MySQL. Your knowledge will be tested on how to *structure*, *style*, *and make your site interactive*. By the end of the course, you should be able to:

- Demonstrate understanding of all HTML/CSS and JavaScript topics covered throughout the course
- Apply knowledge gained during this course by building a website from scratch
- Combine technical and design skills to create a website that is compatible with the latest modern browsers and devices

We encourage you to exercise your creativity; instructors will help you to validate feasibility and manage scope.



#### I. WHY IS THIS COURSE USEFUL?

It is apparent that gaining experience with HTML/CSS and JavaScript is an *essential* 21<sup>st</sup> century skill. Nowadays, most products and companies have a *digital component* to them, and more professionals are working closely with technical teams than ever before. Coding gives you the ability to *bring your ideas to life* in the digital space, make edits and updates to your own application, and communicate more effectively with technical stakeholders.

# II. WHAT PRACTICAL SKILL SETS CAN I EXPECT TO HAVE UPON COMPLETION OF THE COURSE?

This course equipped students with the skills to translate ideas into functional, stylized website for personal of *business purposes*. This course is designed to enable students to create a website with the user in mind, learn the skills of the 21<sup>st</sup> century and know the technical vocabulary to *communicate ideas to others*.

#### III. WILL THERE ANY PRE-WORK?

Yes, there will be approximately 5 hours of pre-work to get you ready for the course.

#### IV. WHAT DO I NEED?

Please come prepared with a laptop.

# TALK TO US



#### FRESHLINKER SYLLABUS

Mobile Development: Unix-OS + Android + iOS

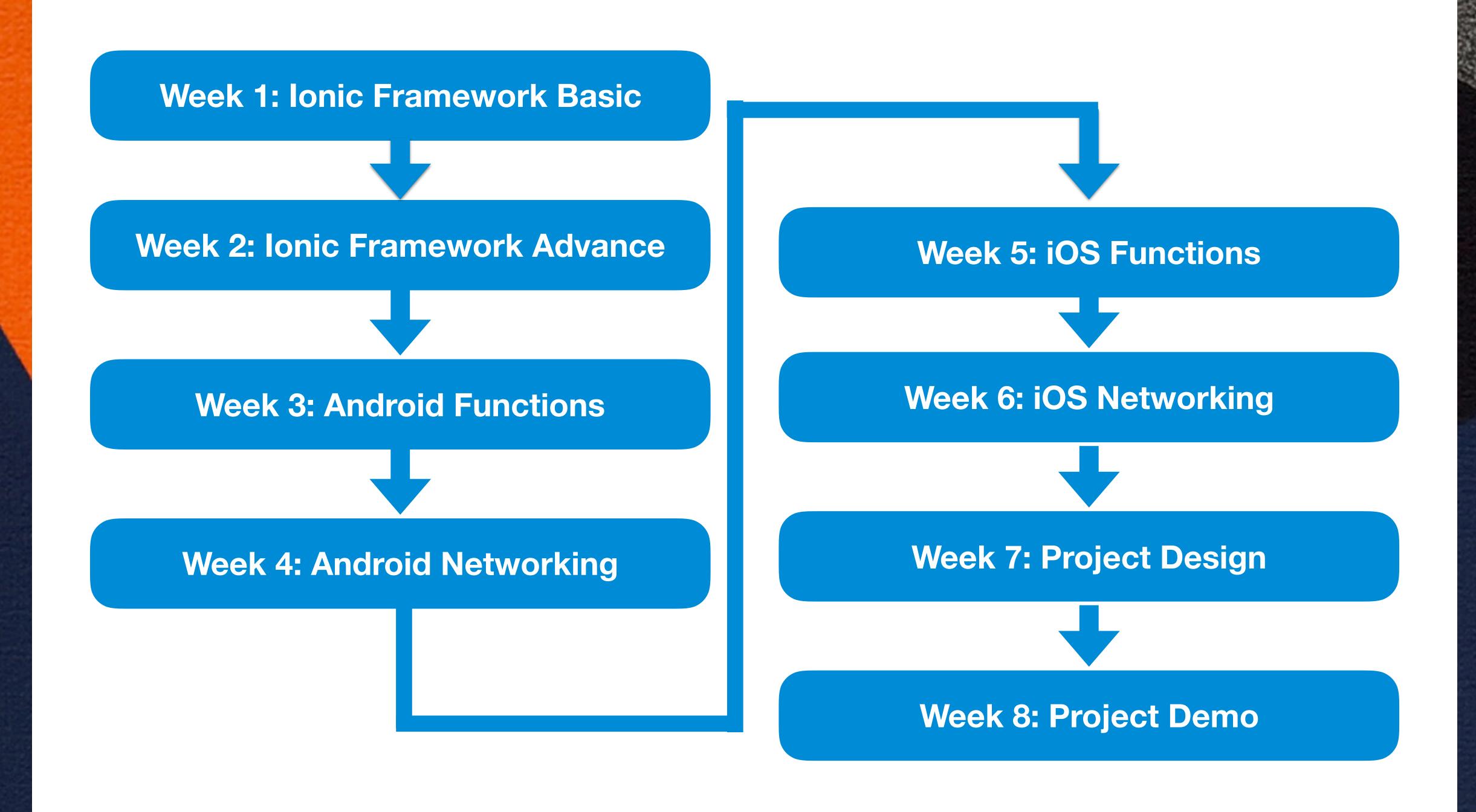
This Mobile development course equips students with the skills to create Native Mobile apps using the Ionic framework. You will learn how to leverage the Ionic Framework and build hybrid apps with AngularJS and Ionic. You'll gain an understanding of how the Mobile programming works and customize your apps using your own designs and ideas. By the end of this course, students should be able to:

- · Create several of your own Mobile apps, the last of which will be Apple/Play Store ready.
- · Program with Ionic framework and AngularJS.
- Develop apps for multiple Mobile devices, including phones and tablets
- Utilize third-party APIs and libraries
- Manage the performance of an app based on how it uses memory and battery resources
- Test and reiterate an app's concept and mechanics through various different prototyping methods.

### WHO SHOULD ATTEND?

Individuals taking this course come from many different backgrounds, from *entrepreneurs, career changers, back-end developers and students.* 

The final project is to design and build a native mobile app of real life case using the Ionic framework and AngularJS Your knowledge will be tested on how to *structure*, *style*, *and make your mobile app interactive*.



#### I. Why is this course useful?

Once you have a good understanding of building websites, it's time to enhance your skills in mobile app development. With more and more Mobile phones into the market, it's a hard to miss opportunity to create a mobile app. Nowadays, most products and companies have a digital component to them, and more professionals are working closely with technical teams than ever before. Coding gives you the ability to bring your ideas to life in the digital space, make edits and updates to your own application, and communicate more effectively with technical stakeholders.

# II. WHAT PRACTICAL SKILL SETS CAN I EXPECT TO HAVE UPON COMPLETION OF THE COURSE?

This course equipped students with the skills to *translate ideas into functional, stylized Mobile app for personal or business purposes*. This course is designed to enable students to create a mobile app with the user in mind, learn the skills of the 21<sup>st</sup> century and know the technical vocabulary to communicate ideas to others.

#### III. WILL THERE ANY PRE-WORK?

Yes, there will be approximately 5 hours of pre-work to get you ready for the course.

#### IV. WHAT DO I NEED?

Please come prepared with a laptop.

# TALK TO US



# FRESHLINKER SYLLABUS USER EXPERIENCE DESIGN

This user experience course provides students the tools and techniques to *design useful, functional and pleasurable products*. A great user experience designer is able to create awesome experiences that *address the needs of customers in a manner that brings them happiness*. This course is designed for students looking to enter the beautiful field of user experience. With an equal focus on theoretical frameworks and practical applications, students will build their *portfolios*, with the guidance of top practitioners.

By the end of the course, students will be able to:

- Understand problem spaces and how to ideate solutions
- · Participate in effective design critique
- Understand how UX designers work with others on a product development team (e.g., product managers, developers, visual designers, etc.)
- · Produce UX documentation, including:
  - Personas
  - Information architecture
  - Page flows
  - Annotated wireframes

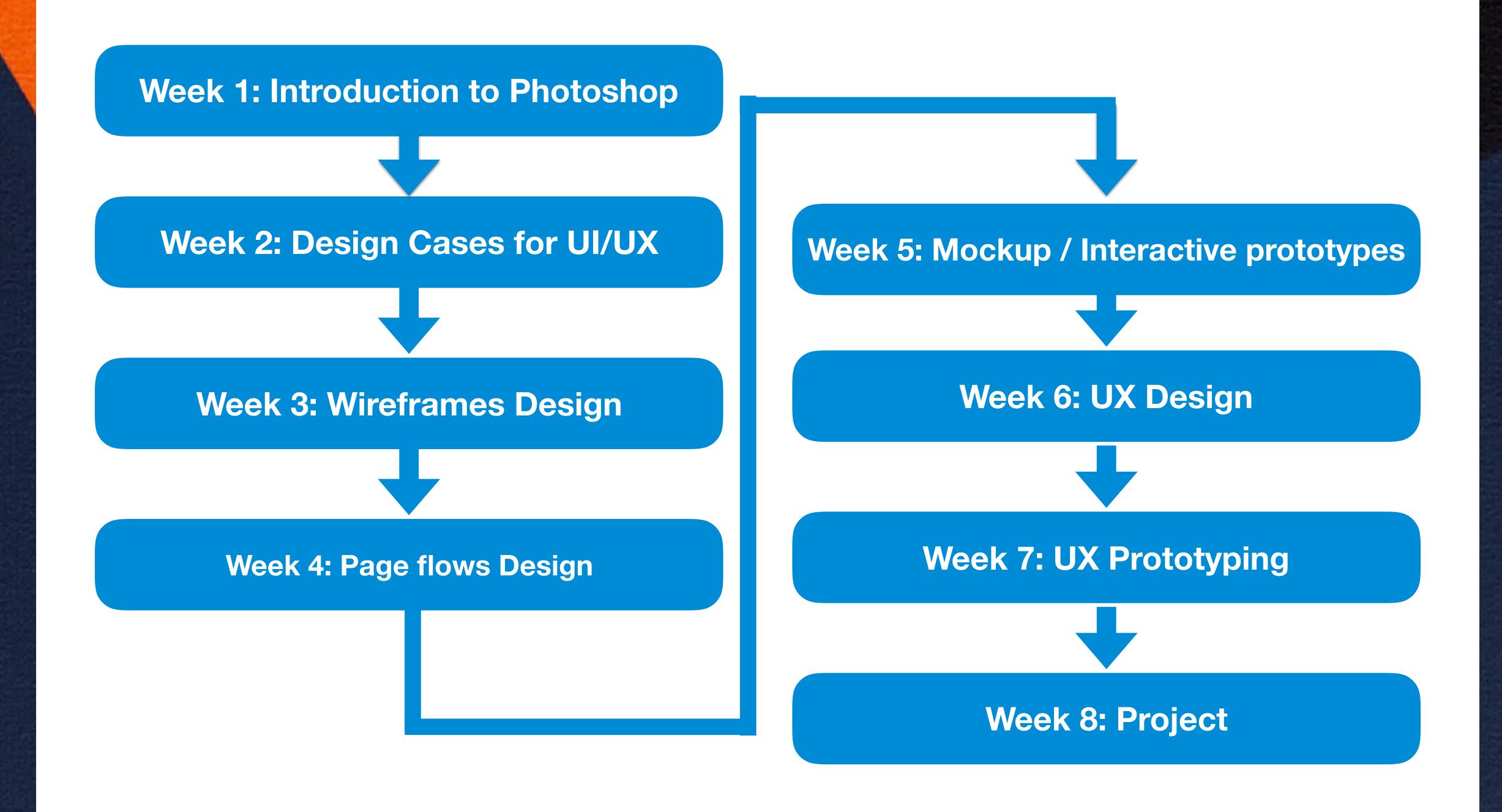
# WHO SHOULD ATTEND?

Individuals taking this course come from many different backgrounds, from *graphic designers, to print designers, creative directors, web developers and product managers*. No specific design or technical experience needed for this course, a passion to learn UX design will do!

Through out the course, you will either design a new product or redesign an existing one. At the end, you should be able to *explain* and defend your design, clearly demonstrating the following:

- · Efficient user research and personas
- Well thought out task analysis and user flows
- A full set of out wireframes with clear explanations and attention to detail

The final project is meant to serve as a *portfolio piece*. Our instructors will work with you throughout the course to present your work and receive feedbacks.



#### I. Why is this course useful?

It is apparent that technology is becoming increasingly multi-channel, multi- device, and universal. And what separates a good product from a great product is user experience. User Experience Designers constantly analyze the things around them in the aim of *bringing joy and simplicity to their products. Companies are now recognizing the need of this*, and most of them are hiring UX designers to make sense of, organize, and design experience with brands, products, etc. UX designers are a unique position to work across many different functions and the field is growing rapidly day by day.

# II. WHAT PRACTICAL SKILL SETS CAN I EXPECT TO HAVE UPON COMPLETION OF THE COURSE?

This course equipped students with the skills to transit into a UX role. We work with hiring managers from various companies to develop the curriculum and the course material will balance the theoretical principles of UX with hands-on project-facing deliverables.

#### III. WILL THERE ANY PRE-WORK?

Yes, there will be approximately 5 hours of pre-work to get you ready for the course.

#### IV. WHAT DO I NEED?

Please come prepared with a laptop. A Mac is preferred but a PC is also okay.

# TALK TO US