# Week 0 - What to do before class begins!

Dear Students,

Welcome to Web Frontend Development II (WDD-330)! I am Bro. James, and I will be your ‘instructor’ this semester. This is a unique class so let me set your expectations, so you won’t be surprised as the course develops.

Many classes are going more and more to 7-week blocks. Same class, same amount of work as the semester class but in 7 weeks. Whatever work you do for a 3-hour class will be **doubled** for this class. Time is of the essence! The class will start Monday Jan 8th. Do not be a procrastinator! OK, Now relax! This class is all very doable and teaches some great concepts along the way. You’re going to do fine. I will share **many** teaching examples with you. I don’t expect anyone to get lost along the way.

# What to do before class begins

# Step 1 – Find a team! And MEET with your team

See this link? [click it!](https://byui.instructure.com/courses/280438/groups#tab-282840) It will take you to the Canvas *WDD330Team* tab for finding a team. The page lists several days and times. Find a time that works for you and drag your name to that team. Keep coming back to the page. If no one is meeting when you can, then find a team that needs more people. You must be in a team by WEDNESDAY Jan 10th. You cannot do this class without being a part of a team. No exceptions. We regularly have people all around the world in the course and teams can accommodate students **from all time zones**. Do your best. Assume all times to be MOUNTAIN. For the South American, African, East European, US East Coast students figure out when you can meet, convert that time to MOUNTAIN time and that will be a team you should be able to commit to. Your evening in Nigeria might work well with noon time slot or vice-a-versa. The Team sign-up page has general times to meet. This is just to get your started. Once you have become a team you can determine the best time and day of the week for you to gather.

**Let me give some examples. I hope you get the idea.**

|  |  |  |  |
| --- | --- | --- | --- |
| Where do you live? | Your TZ | Your Time | What time would work for you?UTC -7 Mountain |
| Nigeria | +1 UTC | 1 PM | 9 PM Mountain |
| Peru/US East coast | -5 UTC | 7 PM | 9 PM Mountain |
| Madagascar | +3 UTC | 7 AM | 8 PM Mountain |
| Madagascar | +3 UTC | 8 PM | 9 AM Mountain |
| Philippines | +8 UTC | 8 AM Wed | 5 PM Mountain Tues |

### Find a time the works for you and convert to mountain. That will be your team.

### I will add you to the MS Team you have selected.

### Do not be the team member that does not show up! You are needed and you need to participate.

## ‘This is the (BYU-I) Way’

Your team is critical to your progress. You will gain so much more by attending your team meetings. Please do not slack off and ignore that experience. As the Mandalorian would say ‘This is the way’. Maybe we would say ‘This is the BYU-Idaho way’. We learn together and share what we have learned. If you know a lot, please share that with the team. If you don’t know anything, PLEASE share your questions because there is someone on the team with the same question.

I think another part of the BYU-I Way is to have fun along the way. After the first 4 weeks or so you have a lot of tools you can start to use. Use them to make something creative, silly, explore, find a new API to tinker with!

# Step 2: You will need a web site of some type

This will be for your Final Personal Project. AND to have a place to experiment with the code topics you are learning

1. Best: An actual web site works the best
2. Very Good and by far the easiest: GitHub pages work very well. If you do not have a github.io repo they are **very** easy to create. If your GitHub ID is BruceWayne, you would create a repo called BruceWayne.github.io. Put an index.html page in there for your personal project and off your go! **Test it before you submit**. Make sure that the link is working. I see a lot of 404 errors. **Have someone else test it to make sure it works.**
3. For example:
   1. My GitHub identity is gtjames.
   2. This is the link to ALL my repos [www.github.com/gtjames](http://www.github.com/gtjames) (if you see something you like clone it)
   3. This is the link to my *GitHub pages* **repo** [www.github.com/gtjames/gtjames.github.io](http://www.github.com/gtjames/gtjames.github.io)
   4. And this is the link to run my web pages [gtjames.github.io](file:///Users/garyjames/Documents/BYU-Idaho/7%20Week%20Letters/gtjames.github.io). By design it is not pretty. It is purely to show you a sample of how a GitHub pages site works.
   5. Anyone can do this. If you need a website, take 15 minutes, and create a repo. YourUserName.github.io. No excuse to not have a simple working site.
4. Because creating a github.io site is so simple I will not accept just your github repo URL or zip files.

# Step 3: Attend the Office Hours frequently:

<https://byui.zoom.us/my/bpJames>  
Tuesday morning 10:00 AM **Mountain Jan 9th**

Tuesday evening 7:30 PM **Mountain Jan 9th**

I will record the meeting and post in the Announcements. But you will get much more by dropping by. Please take advantage of these conversations. Those who come to the meetings ALWAYS do better in the class.

In each week’s announcement I will share the Office hours. **They will change** occasionally. I will try to stick with the times listed above. But I do have students from around to world, so I do try to accommodate them as well. I am always happy to set up other times with you or with your team. Just message me through Canvas and give 24-hour notice and possible times. Tell me in advance what your questions are.

# Step 4: Read my weekly Announcements

This class has NO weekly lectures.

I do not have set instructions for the class. You will be in teams and together you will have weekly team challenges. Primarily you will learn together. I will regularly provide additional resources. Your primary source material comes from the team and from the Internet. This is the design of the class. Please consider whether that fits your learning style or not. Some students have been frustrated that they were not given a lecture each week. Once you start your professional career you will not have weekly lectures either. You will be expected to figure it out with the near infinite resources available to you. This class should train you to learn on your own.

Please be respectful of each other. Some of you have many questions, some have many answers. Make room for everyone in the team discussions. Do not dominate the conversation.

# Late work

* Late work is accepted up to 17 days after the due date.
* You are penalized 1% for every day late past the due date
* All work for weeks 1-4 must be completed before the start of week 5 (Saturday Feb 3)
* This is to encourage you to stay current and active with your team. What you learn in weeks 1-4 is what you will use in the Personal Project in weeks 5-7

# Fun Stuff Ahead

We cover a broad number of topics. But none in too much depth. You will not drown. I have LOTS and LOTS of examples to share. My own work and examples from students over the last 10 years. You will see many ways to solve the problems.

# Questions?

Send a Canvas message is best.

May the Good Code be Yours!

See you in the next Office Hour!!

Bro. James

# The weeks ahead

* Week 1:
  + Get your GitHub repo and Trello project set up!!
  + Find a team, identify a specific time you will meet. Start meeting THE FIRST WEEK of class!!
  + When I see your team is setup I will add you to an MS Teams group
  + Meet with your team!
  + There is one Individual Trello card to do for this week.
    - Here is a hint: What kind of JavaScript object should be used to hold a shopping cart? Is that what is stored in LocalStorage? Maybe that is the root of the problem.
* Weeks 2 – 4:
  + Read the material,
  + Meet twice weekly with your team,
  + Do the team Trello card,
  + Do the one required individual Trello card and find an interesting 2nd individual card to do,
  + Do the weekly reporting assignments and submissions.
* Weeks 5 – 7 build an **individual** application that sums up what you have learned. Here is the rubric I use for that final submission.

**Meaningful usage of the following topics**

25% JavaScript

I expect some honest logic going on here. Validating the screen data, looping through an array of JSON data to display to the screen, creating and using events, changing element styles with JS, changing element classes to use different CSS rules.

15% Third party APIs

More than a wimpy Chuck Norris API is not going to cut it. There are MANY great APIs for weather, travel, sports, NASA, movies, music, Anime, search, GPS, maps. Check out <https://rapidapi.com/marketplace>. You API should return a good rich JSON result set. Something with an array you can iterate through. Weather for the next 8 days, 10 matching movies, song list for an artist, books from an author, pictures from a Mars rover, sports scores, news stories, products for sale. BTW, if you do this you will also get the points for JSON and it is impossible to do a good job here without some serious JavaScript. APIs+JavaScript+JSON and you already have 55% of the points!!

15% JSON

JSON is the *lingua franca* of our time. Your job interviews will expect you to know it.

15% CSS

Use Transforms to round the edges of your input fields, add shadows. Use Transitions to enlarge an input field on focus, and shrink it on blur, wiggle an input field when bad data is entered. Add borders. Don’t go overboard. CSS should subtly add style to a page, not whack you over the head.

15% Events

Use events to enhance the user experience. React to a button click. Initialized the page with data once the onload event triggers. CSS pseudo-state-selectors (hover, focus, checked, after, before) I’ll recognize these as events as well.

5% LocalStorage

By design it is local to current device. It is not available as you move around from phone, to tablet, to laptop. But it is nice to know how to implement. It can add value to an app to remember the user from their last visit.

This adds up to than 90%. The additional 10% comes from assessing your Creativity, Exploration and Collaboration.

You will note that 55% of the points comes from API + JSON + JavaScript. If you build your application around a good third-party API you can’t help but get points for all three of these topics. There are APIs for weather, sports, news, movies, books, … and the list goes on. Start thinking about it now. I will share many examples. And you will see them in my office hours!

**Grading for the class**

**Preparation Learning Activities**10% of Total

* W01 - W05 Prepare: Learning Activities

**Team Activities**  10% of Total

* W01 Setup Activity: Guided Team Project
* W02 Team Activity: Dynamic Product Details Page
* W03 Team Activity: Dynamic Header and Footer
* W04 Team Activity: Checkout

**Project Artifacts.        20% of Total**

* W01 Individual Activity: Add Item to Cart
* W02 Individual Activity: Dynamic Product List
* W02 Project: Report on Tasks
* W02 Project: Status Update
* W03 Individual Activity: Expand Inventory
* W03 Project: Report on Tasks
* W03 Project: 60-second Status Update
* W03 Final Project: Brainstorm
* W04 Individual Activity: Error Checking and Validation
* W04 Project: Report on Tasks
* W04 Final Project: Application Proposal
* W04 Project: 60-second Status Update
* W05 Final Project: Report on Tasks
* W05 Final Project: 60-Second Status Update
* W06 Final Project: Report on Tasks
* W06 Final Project: 60-Second Status Update

**Course Outcome Demonstration.**  60% of Total

* W07 Final Project: Submission