# Milestones

# Phase 0: Ongoing (5%)

## Weekly timesheet

### Use provided template

### Weekly push to GitHub; available to instructors via URL in Moodle notes

# Phase 1: Brainstorming (2.5%)

## Due beginning of the 2nd week

## Peer review

## A clear presentation; as if you are presenting to a client

## Five minute presentation and five minutes for feedback

## Must be in class to present and receive/offer feedback

## Deliverables:

### On time attendance

### Presentation with a visual aid showing the user experience

### Audience participation

# Phase 2: Planning (10%)

## Due beginning of the 4th week

## Project description (project\_description.docx)

### Use the following headings:

#### Clients

##### Who are the clients? (people paying for site development)

#### Users

##### Who are the users? (general public, registered users, possibly the clients)

#### Problem/Need

##### What problem or need does your web application address?

#### General Functionality

##### What is the general functionality?

##### What will each level of user be able to do?

### Refrain from describing technology (JavaScript will be used to…, PHP/MySQL will be used to…)

### Submitted via Moodle file upload

## Domain name and live hosting

### One link that links to a page on your domain.

### One link that links to the whois information.

### Submitted as a Moodle note with Project Description file upload

## Database

### Minimum of 4 tables (though you will likely have MANY more)

### Database optimization

#### Normalized tables to 3NF; including, but not limited to:

##### Appropriate use of lookup tables

##### Appropriate 1-1, 1-n, n-n relationships

##### Minimal repeated data

#### Indexes

#### Appropriate data types

### Database diagram

#### Hand drawn or a document similar to Access’ Relationships window.

##### If hand drawn, scan as **dbw-phase2.jpg**

##### If created with software, export as a JPEG with the file name **dbw-phase2.jpg**

#### Must indicate optimization items listed above

## Deliverables:

### project-description.docx

### dbw-phase2.jpg

### two links

# Phase 3: Functioning Production Environment (5%)

## Due beginning of the 6th week

## Updated database wireframe that clearly shows suggested improvements are incorporated

## Generated Database

### SQL dump (upload via Moodle, database-phase3.sql)

## Database connection PHP include file (upload via Moodle, database-connection.php)

## Proof that PHP and the database are working

### A PHP page on the server that displays content from the database. The database can contain data that is hard coded. (Post link in Moodle note with dump and connection file uploads)

## Deliverables:

### dbw-phase3.jpg

### database-phase3.sql

### database-connection.php

### one link

# Phase 4: Demonstration Checkpoint (10%)

## Due during the 9th week of the term

### Start usability testing during 8th week

## Single multi-user login

### Single login that determines the user level and redirects appropriately.

#### Form validation

##### Must have both client (HTML5 and/or JavaScript) and server side validation

##### Username and password required

## Some dynamic data displayed

### Personalized logout link

### User-specific data (three possible views)

## Page framework complete

### All pages are built though not necessarily with their content

### 100% functional navigation

### Layout scaffolding is complete (site is complete sans content)

#### CSS

#### Responsive

#### Colors

#### Non-essential graphics

## Students demonstrate live to instructor

## Usability test

### Application is tested by at least three other students

### Student has tested at least two other student’s application

### Submit usability form (provided by instructor) by the end of class

## Deliverables:

### Demonstration of login

### Demonstration of dynamic data

### Demonstration of user-level specific dynamic data

### Demonstration of completely navigable page structure/hierarchy

### Completed usability form(s) that you collected (must include the names of your reviewers) – physically handed in (not posted to Moodle)

# Phase 5: Final Usability Testing (2.5%)

## Due middle of the 12th week

## Second round of usability testing

### Application is tested by at least three other students

### Student has tested at least two other student’s application

### Submit usability form (provided by instructor) by the end of class

## Deliverables:

### Completed usability form(s) that you collected (must include the names of your reviewers) – physically handed in (not posted to Moodle)

# Phase 6: Final Submission (50%)

## Both a live demo and localhost demo must be available

### You will present using the live server. The localhost version is to be used only in case the A-B Tech network or your server is down.

### Print enough handouts for each reviewer (and Charlie and Alec) with the following information. And make sure the font is large enough and readable:

#### GitHub address

#### URL to live site

#### Member username and password

#### Admin username and password

### You will have 5 minutes before your presentation to get yourself ready – make sure your site is available online. Or – if necessary – to install/configure the localhost demo or connect your own laptop to the overhead (via HDMI) to show a local version.

### You will have 15 minutes to present. Do not talk about technology! Just demonstrate the general public, member, and admin views/functionality.

### There will be a 10 minute Q and A period after you present where reviewers will likely ask technical questions.

### Your entire presentation will last 30 minutes including set up, presentation, and questions.

## Expo Presentation on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Deliverables due on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Final Presentation on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Assets

### Media sources documentation (media-sources.docx or .pdf)

#### Word or PDF document

##### Thumbnail images with URLs pointing to hosting page (not image)

##### All media must be legal to use and free from copyright violations

### Database Wireframe

#### Must show:

##### Relationships

##### Primary and foreign keys

##### Data types

##### Indexes

#### Must represent the actual database used; must match SQL script

### Must be available three ways:

#### <site url>/assets

##### A custom index page with links to each asset file. Also a link to the original artwork folder, which has directory listing enabled.

#### GitHub

#### Moodle

## Database design

### Database optimization

#### Normalized tables (to 3NF) with appropriate relationships

#### Indexes (not limited to primary/foreign keys)

#### Appropriate data types

### Database wireframe (dbw.jpg)

#### Hand drawn or a document similar to Access’ Relationships window.

##### If hand-drawn, scan as dbw.jpg

#### Must indicate indexes, relationships, and data types

### SQL script file (to generate tables and default content, database-final.sql)

#### Must include at least one admin account and one registered user account

#### Must include all initial content

#### Store the file as .sql with comment at the top that indicates the included logon credentials.

## Forms

### Both client side and server side validation

### Usability

#### Error messages and confirmations

#### ‘Required’ indicators

#### Sticky fields

## Search feature

### Some content is searchable, for example:

#### Users

#### Content

#### Prices

#### Dates

#### Etc…

### Accurate result set

### Usable results and/or messages

## Security

### Prevent SQL injection

### Prevent XSS

### Encrypted passwords

### CAPTCHA (choose one that is usable! Not impossible/frustrating for users.)

### Protected member/admin pages

### Prevent HTML injection

## Code functionality and best practices

### HTML is semantic and validates (for HTML in your control)

### CSS is semantic and validates (for CSS in your control)

### Runs without errors

### Appropriate modularity

### PHP comment blocks

### PHP function abstraction

### JavaScript function abstraction

## Usability/Accessibility

### Fully responsive (including no horizontal scroll)

### WCAG color contract conformance to level AA

### Consistent and intuitive navigation

### Intuitively usable

### Current page marker (page heading, navigation)

### Single login/personalized logout on every page

#### (Not login for members and a separate one for admins)

### Works in versions of browsers installed at A-B Tech

### Custom 404 pages

## Files to Submit via Moodle

### Last-First-WEB-289-2018SP (zipped)

#### Entire production web site – all files and folders

##### Don’t forget the assets folder!

##### index.php (or index.htm) – contains links to the following, opening each in a new window/tab:

###### Original unedited artwork (folder) – directory listing enabled

###### dbw.jpg

###### database-final.sql

###### media-sources.docx

## Presentation/demonstration

### 5 minutes to set up localhost if needed and pass out information sheet to each reviewer that includes the following information:

#### GitHub address

#### Site URL

#### Admin login credentials

#### Member login credentials

### 15 minute presentation, using localhost (reviewers use live demo)

### 10 minutes for questions and answers

### Show all three views

#### Walk through each of these views to demonstrate the user experience

### All assets are available to reviewers as a URL from your domain (http://yourdomain.com/assets/)

### What part did you find the most challenging?

### What would you do differently/add in version 2.0?

### What aspect did you enjoy the most?