Our goal is to create a comprehensive system to support STEM activities in the Michiana community. The Michiana STEM Clearinghouse (MSC) will provide an intuitive meeting place (a portal) for members of the public, educators, educational institutions, practitioners, commercial organizations, and governmental institutions to discriminate information, publicize STEM events or job opportunities, and register and participate in STEM activities.

Creating a STEM clearinghouse for the Michiana region is a significant design undertaking. As it’s the case with most complex system, the first step in the process is to understand and analyze the problem and identify the data requirements of the overall system. For the most part this work has been done during spring of 2015 in our database class (CSCI-C442/INFO-I450) by CS and INFO students. The second step (which is subject of this extra credit assignment), is to research a number of similar web sites to see if we can further enhance our understanding of the problem domain. Once we understand the requirements provided, you are to pick one of the subsystems (provided in the Decomposition Diagram), and design a series of web documents that support the services in the subsystem.

Requirements Provided by the Client and your Professor!

After interviewing the client, and for the purpose of this assignment, we will assume that currently a number of local organizations create and disseminate STEM related information via emails, web sites, posters, presentations, word of mouth, etc. Currently, there is no central location or repository for such data. Our client(s) would like us to create such a repository. Below you can find a summary of requirements that our client(s) have shared with us.

◘ At its core, the system must support 5 categories of users:
  1) The **Public** (non-member users of the system)
  2) **Clients** (registered members of the system, primarily consuming information and services)
  3) **Providers** (registered members of the system, primarily providing STEM services, publicize STEM events or activities.)
  4) **Administrators** (Individuals in charge of monitoring, managing, and general oversight of the accuracy and integrity of the information in the system.)
  5) **Super-user** (a single site administrator)

◘ The members of the public should be able to navigate and search for information, events, and activities freely and without the need to login or be authenticated.

◘ Administrators, Clients, and Providers must be authenticated before they are allowed to use their portals system. Administrators can only be added to the system by the Super-user (site administrator).

◘ Clients must be able to freely register and use the system. Because we would like to know what is interesting to our users, we would like the ability to maintain access information for future analytical analysis. (what pages were viewed, for how long, etc.)

◘ Providers should have the ability to register as new users. Providers must create a profile, be authenticated by one of the Administrators or the Super-user, before they can publicize any new events or activities in the system.
All users should be able to suggest new events or activities, and donate or support the organization and earmark their donation toward a given event or activity (if they wish).

Clients, once registered and logged-in, should be able to create/edit their profile, search for or register for events or activities. They should be able to pay for events, and after attending an event, they should be able to complete a survey for that event.

Providers, once registered and logged-in, should be able to create/edit their profile, search for events or activities, and propose new events or activities. New events or activities, should initiate an alert to the site administrators, so that they could be validated and approved, before they become publically available. Once the event is approved, the provider should be notified of such approval. The approval process (time, date, administrator-id, etc.) should be logged for audit purposes.

Administrators, once logged-in, should be able to create/edit their profile, search for events or activities, approve new events and activities, proposed by Providers, manage members, manage events, manage fund raising activities, manage stipend processing, manage site messaging, communication, mass email distributions, view reports, and perform analytics.

All logins attempts into the system and all email communications, initiated from the system should be logged and audited.

Research The Following Sites:

- [http://www.michianastem.org/Home](http://www.michianastem.org/Home)

Your task, if you choose to accept it, is to design the user interface for one of the subsystems described above. If you decide to pursue this extra credit project, I would be happy to meet with you to brainstorm the problem. Your design must encompass the following elements:

1) Use of authentication (userid and password to login)
2) Use of PHP classes
3) Use of PHP SESSIONs, POST, GET, etc.
4) Use of MySQL database (I will provide you the tables)
5) Use of CSS to allow for easy customization of the web page
6) Use of Java Script to perform some client-side input validation, animation, etc.
7) Use of HTML to create forms, etc.
8) Use of images, sounds, video to provide help to the user.

If you are interested in working on this project make an appointment to see me. (Start Early!)