**List of functions created:**

* **SetController.php**
  + actionFlowSet(): Called after a user has made changes to the format of the Set flowchart model. It first parses the necessary information retrieved via POST in order to make changes to a courses position within the Course display.
  + accessRules(): Permissions based function used to determine what users are able to call particular functions within a controller.
* **GroupController.php**
  + actionFlowGroup(): Called after a user has made changes to the format of the Group flowchart model. It first parses the necessary information retrieved via POST in order to make changes to a sets position within the Set display.
  + accessRules(): Permissions based function used to determine what users are able to call particular functions within a controller.
* **TrackController.php**
  + actionFlowGroup(): Called after a user has made changes to the format of the Track flowchart model. It first parses the necessary information retrieved via POST in order to make changes to a groups position within the Group display.
  + accessRules(): Permissions based function used to determine what users are able to call particular functions within a controller.
* **FlowCourse.php**
  + model(): Function which creates the ability to query and alter the flow\_course database table.
* **FlowSet.php**
  + model(): Function which creates the ability to query and alter the flow\_set database table.
* **FlowGroup.php**
  + model(): Function which creates the ability to query and alter the flow\_group database table.
* **CourseFlowInfo.php**
  + getCourseInfo():When a flowchart does exist for a particular set this function creates a view of the courses using the set id as the input parameter. Returns an array containing course information respective to its saved position, course ids, and the respective flowchart id. This function relies on finding the position for each element in the flowchart database.
  + getSetinfo():When a flowchart does exist for a particular group this function creates a view of the sets using the group id as the input parameter. Returns an array containing course information respective to its saved position, set ids, a set index, and the respective flowchart id. This function relies on finding the position for each element in the flowchart database.
  + getTrackInfo():When a flowchart does exist for a particular track this function creates a view of the groups using the track id as the input parameter. Returns an array containing course information respective to its saved position, group ids, a set index and group index, and the respective flowchart id. This function relies on finding the position for each element in the flowchart database.
  + getDefaultSet(): When a flowchart does not exist for a particular set this function creates a default view of the courses using the set id as the input parameter. Returns an array containing course information and course ids.
  + getDefaultGroup(): When a flowchart does not exist for a particular group this function creates a default view of the sets and courses using the group id as the input parameter. It returns an array of sets that include courses, in addition to set id’s, and the number of sets.
  + getDefaultTrack(): When a flowchart does not exist for a particular track this function creates a default view of the groups, sets and courses using the track id as the input parameter. It returns an array of groups that include sets and courses, in addition to groupd id’s, group index and a set index.
  + getRequisites(): Accepts an array of courses. Using these courses it iterates through the set and determines what courses have pre-requisites. It then orders the list of courses by the number of pre-requisites the course has in ascending order.
* **HisRequisites.php**
  + model(): Function which creates the ability to query and alter the his\_requisites database table.
* **CurrSetByCourse.php**
  + model(): Function which creates the ability to query and alter the curr\_set\_course database table.
* **CurrTrackByGroup.php**
  + model(): Function which creates the ability to query and alter the curr\_track\_group database table.
* **CurrGroupBySet.php**
  + model(): Function which creates the ability to query and alter the curr\_group\_set database table.
* **flowchartdrag.js**
  + Box(id, dropState): Initializes three variables based on the parameters passed. Initiaizes the id of the Box as well as the current state, or dropState. The variable value is set to empty.
  + allowDrop(obj, ev): Tests to see whether or not the box, or obj, can be dropped in a specific location, ev.
  + drag(parent, ev): Acknowledges the box, or parent, is being dragged in a certain environment, ev.
  + drop(dropTarget, ev): Ensures that a box can be dropped in a specific location. Inside this function is where the key updates to the metadata is made based on position, flowchart id, and either course, group, or track id.
  + dragStart(obj): Changes the boxes border to show that it is being moved to a new location in addition to updating the object source and changing the dragging flag.
  + dragEnd(obj): Signifies the end of dragging a specific object by changing the destination border to red and updating field canDrop to true and the isDragging flag to false.
* **flowchart.css**
  + float-left: Sets the position to relative and dictates that positions should float left.
  + drag: Sets the position of objects that are being dragged to relative.
  + outer: Defines the outer container for the flowchart.
  + box-container-group: Sets the width and position for a track container of groups.
  + box-group: Defines how a group should appear inside the group container.
  + box-container-set: Sets the width and position for a group container of sets.
  + box-set: Defines how a set should appear inside the set container.
  + box-container-course: Sets the width and position for a set container of courses.
  + box-course: Defines how a course should appear inside the course container.
  + result: Sets the positon to the left.
* **\_links.php (For Track, Group, and Set)**
  + displayFlowChart(): Function that builds the flowchart visualization using the information gained from calling functions found in **CourseFlowInfo.php**.