**MIS 4596**

**Project Charter**

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| ***Project Title*** | ***Course Search(TBD)*** | ***Product/Process Impacted*** | Course Search Process |
| ***Start Date*** | ***1/25/17*** | ***Organization/Department*** | ***GenED*** |
| ***Target Completion Date*** | ***5/10/17*** | ***Course search process*** | ***GenED Dept.*** |

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|  |  | Description | | | | | | | | | | | | |  |
| **1. Project Description** |  | What problem is the team addressing? What problems do customers have?  Temple University’s course search requires students to search by department or GenEd area goal followed by sifting through a multitude of course sections. Currently, students must use a 60+ page booklet to find courses they are interested in taking, or use banner and manually check each course description. GenEd spends around $10,000 annually printing course booklets to be used by students and advisors. This is not only expensive but inefficient due to time and material costs, as well as being bad for the environment. The school currently only keeps track of courses students are taking but do not have a way of obtaining data on what courses students would like to take.  The purpose of this project is 3 parts, using a focus group for end-users to see what features they would like in a course search application, determining a solution which will require no recurring costs while allowing the GenED department to add an improved search function, determining options for collecting/delivering data. The search function should allow students to search for any class based on keywords/categories that pertain to class topics or sub-topics and decrease the amount of time it takes to find/add a course. Ideally, this will increase student satisfaction and participation in their GenEd courses. | | | | | | | | | | | | |  |
| **2. Project Scope** |  | What areas are inside and/or outside the work of the team? What are the boundaries (start and end points)? What specific parts of the overall problem will you focus on?  The project is largely focused on creating a web-based application that will allow students to search for courses relevant to the search term based on course descriptions syllabi. The project will also include focus groups that will be necessary to determine features end-users would like to see, determining options for the collection/distribution of data. The team will assist in recording feedback from students and advisors in addition to bug testing. The project also includes a web app to perform searches. | | | | | | | | | | | | |  |
| 1. **Project Goal and Deliverables**   What must the team deliver to be successful? Does the team goal link to the key performance parameters established by the sector leadership teams? What is the baseline performance? How will the goal be measured? | | | | |  |  | **Metrics**  (propose specific metrics for your project, e.g., cost reduction, time reduction, customer satisfaction, etc.) | | **Baseline** | **Current** | | **Goal** | |  | |
| In order to be succesful, the team must deliver a fully functional search page and results page that allows students to search for courses by keywords and/or content category. The application will also include a method for collecting data and distrbuting the business insights derived from the data.  The project solution must have $0 in recurring costs.  Deliverables include:  Statiscal analysis of course descriptions/syllabi | | | | |  |  | Student Satisfaction  Survey (1-5) | | **NA** | **NA** | | **4+** | |  | |
| Models for future courses  Research & Pros/Cons of possible indexing solutions  Functional search page | | | | |  |  | Time Reduction | | **10min** | **10min** | | **5min** | |  | |
|  | | | | |  |  | Cost | | **$1100** | **$1100** | | **$1100** | |  | |
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| **4. Business Results Expected** | | |  | Business Intelligence - End-user data (Ex. Most searched for courses)  $10,000 in annual savings from eliminating booklet  Improved customer satisfaction (determined through survey, qualitative scale) | | | | | | | | | | | |  |
| **5. Team members** | | |  | Who is this team accountable to? Who is your champion? Who is on this team? What are the specific skills/roles of each team member? Who can the team turn to for expert guidance?    GenEd Dept (Dana Dawson) - Sponsor/Project Champion  Kevin Diem – Full stack dev, GenEd connection  Quy Le – BA, Proj.+ Cert, Front-End dev exposure  Darpan Patel – BA, previous/current BA intern at QVC  Mike Black – Dev, experience with AWS | | | | | | | | | | | |  |
| **6. Support Required and risks** | | |  | What additional resources does the team need? What obstacles does the team see, and how can they be resolved?  We will need to collect course syllabi and engage implementation resources for support who might be otherwise occupied in their normal operational activities. These resources will be necessary for creating a place where GenEd employees can view the original syllabi to be used in the search application. GenEd currently stores their documents unformatted and locally on their computers.  We will also need support from Computer Services to store a document oriented database. It will either need to be generated from existing syllabi or input by processors. This can be resolved by creating a form for GenEd faculty to share predetermined portions of their syllabi. This furthers the goal of students seeking classes they want to take because they will be able to view syllabi information before the class begins.  A potential risk is that they will have to develop a new way of collecting syllabi if the school switches away from TU cloud. | | | | | | | | | | | |  |
| **7. Customer Benefits** | | |  | How will this project help the customer of the organization? Could improvements have a negative impact on the customer?  The project will cut down the time it takes for students/advisors to find courses and provide a feature which will display an aggregate page of all courses relevant to keyword the student searches. The project will also include a survey which will allow students a say in any features they may like to see in the solution. It can lead to improvement in satisfaction and participation in GenEd courses.  The project will save the department approximately $10,000 annually.  There will be cost savings over traditional web application methods by being charged only for the resources used instead of monthly.  This could lead to students not finding classes if it is implemented poorly. | | | | | | | | | | | |  |
| **8. Technology Architecture** | | |  | What are the specific tools/technologies you will be using? What is the experience of team members with these tools?  Front-End Web Dev (HTML, CSS, JS)– Kevin, Mike, & Quy all have experience with it (Courses, hobby, work)  Back-end Dev (PHP, Amazon Lambda) – Kevin will do server side development on gened.temple.edu and tuportal. Mike has experience with Lambda.  Analysis (R, Java) – Kevin & Mike have experience with this. (Courses, hobby, work)  Core tools to date:  Carrot2 text mining library  tm R library  Temple’s course leaf course description API  Planned tools:  Apache OpenNLP | | | | | | | | | | | |  |
| **9. Overall schedule/Work Breakdown**  **Structure** (Key milestones & dates) | | | | | | **Responsible**  **individual** | | **Output (notes, diagrams, interviews, screen prints)** | | | **Date started if in progress**  **Or Expected completion date** | | **Date completed or date completion is expected** | | |
| Planning   * + Proposal 1/25   + Charter - 2/1 | | | | | | Quy Le  Darpan Patel | | Proposal, Project Charter | | | 1/25 | |  | | |
| Analysis | | | | | | Kevin Diem,  Quy Le | | Financial Analysis, Current data model & process model | | | 2/1 | |  | | |
| Design | | | | | | Kevin Diem | | Front-end prototype,  Updated data model & process model, systems architecture | | |  | |  | | |
| Implementation: Construction  Need to do backend | | | | | | Kevin Diem  Mike Black | | Finished prototype, deploying Lambda to test environment | | | Early April | |  | | |
| Implementation: Testing | | | | | | Mike Black | | Sample queries from frontend, code review | | | April | |  | | |
| Installation | | | | | | Mike Black | | Integration with Temple GenEd systems, deploying Lambda rules and functions to production | | | Early May | |  | | |