**MIS 4596**

**Project Charter**

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| ***Project Title*** | **My.DI –** My Digital Identity Score | ***Product/Process Impacted***  | Manage student’s online presence |
| ***Start Date*** | 9/8/16 | ***Organization/Department*** | IT- Digital Marketing Department |
| ***Target Completion Date*** | 12/6/16 | ***Champion*** | Senior Executive- David Schuff |

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|  |  | Description |  |
| **1. Project Description** |  |  Our generation is obsessed with using social media to share pictures, post opinionated status updates, and connect with others. There are plenty of instances when young adults have posted something inappropriate online, and it has tarnished their digital identity, or online reputation. Young adults, college students especially, need to maintain a positive presence online to secure job interviews, foster professional relationships with their colleagues, and transition smoothly from student life to adulthood. In order to quell social media tribulations, we are creating an application so individuals have the power to seamlessly manage their pictures and profiles. It will also create a safer and more professional Internet environment. Because Google and social media platforms have API’s that can be accessed through log in credentials, the user can connect their social media accounts to the app, and it will notify them if the content they are posting is appropriate and professional. The app’s features include flagging inappropriate or suspicious content which the user can then take the necessary steps to remove before any damage can be done to their online presence. We are leveraging personality insights, visual recognition and tone analyzer from IBM Watson to analyze social media profiles, pictures, and documents. In addition, the main capability of the application is that users can receive a digital identity score. This will measure how the user is perceived on the social media sites they use such as Google, Facebook, Twitter, etc. The user will be measured against their network using an algorithm. The facets of this score are based on professionalism and calculated using a decision tree similar to how movies are rated using such as violence, profane language, and sexual content. The DI score decision tree used to calculate the score out of 850 can be accessed in the appendix.  In terms of our competitive analysis, this app is a hybrid of LifeLock which is an identity theft protection platforms, Vmock which is a resume review program, and LinkedIn Student which is an application within a professional social network. Our short-term business plan is to sell our app to career services centers within colleges and universities. The purpose of the university partnership is to build brand reputation and gain prestige to make potential customers aware of our services. Our long-term business plan is to capture the interest of LinkedIn and Monster, so they purchase our application services and integrate them into their service offerings.**Capabilities:*** Assign a digital identity score that measures the users online “professional” presence
* Detect threats and flag inappropriate content
* Leverage IBM Watson’s Personality Insights API to analyze the overall profile
* Leverage IBM Watson’s Visual Recognition API to analyze content in pictures
* Leverage IBM Watson’s Tone Analyzer API to analyze documents
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| **2. Project Scope** |  | **App Development:*** Users can connect social media accounts to the app for a personalized experience
* Provide customized dashboard with comprehensive score reports and score justifications
* Offer recommendations, so the user can track and improve their professionalism scores

**User Capabilities:*** Verify social media accounts
* Manage social media traffic (using IP address)
* Receive notifications about the status of inappropriate flagged content
* Personality insights – users can sync their social media profiles using IBM Watson’s API and an insight about that person’s personality will be outputted based on the content of the profile (for example, this person is serious or humorous)
* Visual recognition – users can upload pictures using IBM Watson’s API and a score will be outputted based on the content of the pictures (for example, pictures depicting alcoholic socializing will return “party” and that will impact the user’s digital identity score)
* Tone analyzer – users can upload documents (emails or resumes) using IBM Watson’s API which assesses the tone (for example, this email has an aggressive or professional tone)

**Process:*** Before app development, we conducted research about similar apps that are already offered in the market and online trends associated with Internet monitoring and policing
* We also conducted research by interviewing Megan Panaccio, a staff member of the Fox’s Center for Professional Development (CSPD), to learn about student job placement rates, student interview rates, and how social media presence is linked to those statistics
* Before we present our solution, we will ensure that the app is functional, provides a useful service to our users, and there is a solid way of monetizing it

**Solution:*** Provide a functional application that connects to social media platforms such as Facebook and Twitter
* Help maintain a safe Internet environment so college students can obtain or retain a job without worrying about inappropriate online content
* Allow users to remove inappropriate content in a timely manner
* Ensure that college and university students have a positive online presence by providing real-time feedback and an intuitive scoring system
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| 1. **Project Goal and Deliverables**

To be successful, the solution should take the user through the whole process from monitoring the student’s online presence to securing a job interview. |  |  | **Metrics** | **Baseline** | **Goal** |  |
|  |  |  | **Interview Acquisition Rate**Number of interviews acquired by university students | 80% | 85% |  |
|  |  |  | **Job Placement Rate**Average job placement rate within six months of graduation according to the National Center for Education Statistics | 89% | 92% |  |
|  |  |  | **Customer Satisfaction**Increase customer satisfaction based on number of profile visits (4.5 stars out of 5 on the app store) | N/A | 90% |  |
|  |  |  | **Recruiter Satisfaction**Increase recruiter satisfaction based on college career center satisfaction surveys | 70% | 81% |  |
|  |  |  | **Alumni Giving Participation Rate**Increase alumni giving participation rate which is the result of more satisfied alumni relationships from job placement | 6.86% | 8% |  |
|  |  |  | **Subscribers**Estimated usage is based on the 2% reported job placement percent at Temple 2%. Making reasonable assumption that only 5-8% of students will use this application | 0 | 2,960 |  |
|  |  |  | **Sponsorships**Obtain ten college sponsorships within the fifth year of implementation | 0 | 10 |  |
|  |  |  | **Average Score Change Metric**Average improvement in users score over 6 months in year 2 after beta testing based on credit bureau’s annual State of Credit report | N/A | 15.18% increase |  |
| **4. Business Results Expected** |  | As an initial goal, we expect to have a minimum of ten post-secondary institutions subscribe to our service within five years of implementation. We will roll out a beta version of our application to Temple University to gain a user base within the first year. We anticipate these results because post-secondary institutions today have a financial interest in achieving the highest job placement figures versus other competing colleges and universities. We based our financial projections on Temple University, University of Massachusetts Amherst, and Villanova University as clients. Post-secondary educational institutions of this size and caliber are willing to pay for this service, since it enables students to monitor their digital identity in order to increase their appeal to potential employers. Data to support this conclusion comes from a study conducted by Reppler in 2012 which concluded that 68% of employers have rejected a candidate because of something they saw online. Additional findings from the same study found that 69% of employers said that they hired employees because of their positive online presence. Based upon this study, post-secondary institutions would likely pay for digital identity monitoring and improvement services, since a student’s digital identity does impact the job placement rate for colleges and universities. We will breakeven in year 5 which is outlined in our Financial Analysis Spreadsheet. The sources we have used to calculate the benefit of our metrics is based on the National Center of Education Statistics and page 78 of Temple University’s Factbook on alumni donations. |  |
| **5. Team members** |  | Our team is accountable to our champion and head of the IT department, David Schuff. Our team consists of Kim Eastlake, Noah Mercado, Ryan Pace, Mia Jardine, and Nodir Zakhidov. We are all working together to build a cohesive solution, but each of us is accountable for specific deliverables. Kim is the mentor liaison and is responsible for requirements documentation, PowerPoint deck, and developing the website to showcase our application, Ryan is responsible for developing the front-end prototype design, Mia is responsible for constructing the business case which is composed of the competitive and financial analysis, Noah is responsible for developing back-end prototype functionality and mapping the IT architecture and data model of the application, and Nodir is responsible for the process map which is the decision tree of our DI score. Our team has access to an IBIT mentor, Sondra Barbour, Executive Staff for Leidos and Member of the Board of Directors for 3M Company, for expert advice and guidance throughout the project. |  |
| **6. Support Required and Risks** |  | **Resources:**Our Digital Identity app will require the use of IBM Watson’s APIs to offer functionality and connections to social media and email accounts. Additionally, we will need a considerable investment of $72,800 in the first year for labor costs to pay a developer to create the application. Maintenance costs are 2,520 in years 2-5. Other costs are outlined in our Financial Analysis spreadsheet.**Obstacles:**Initially, we see a problem with incentivizing colleges and universities to purchase a subscription. In order to mitigate these problems, we will clearly demonstrate our value proposition when pitching our application to convince business schools why our service is necessary. Our value comes from our ability to increase the percentage of post-graduation job placement and get more recruiters to come to their job fairs. Another considerable obstacle is protecting the user’s personal information from a cyber perspective. Given the access the application will have and the potential for sensitive information to be collected, this is of the upmost importance. To promote cyber security, our IT infrastructure will require data encryption, redundant firewalls, and data segmentation (separation of user database from password database). Customer passwords must be encrypted as well as a layered defense model with internal multi-factor authentication. A well-managed list of privileged credentials/accounts and who has access to them is essential to identify where the application is most vulnerable to internal security attacks. Thus, preventative measures like contingency and business continuity plans need to be implemented beforehand. We also need to enforce password procedures to ensure passwords are strong, secure, and routinely changed.  |  |
| **7. Customer Benefits** |  | Customers will benefit from our app both directly, through eliminating incriminating and inaccurate Internet content, and indirectly through increased job placement and job retention. We can quantify higher job placement rates for colleges and universities because this is now one less reason why secondary education students are not getting hired. Our justification for the impact of interview acquisition rates is outlined in our metrics and further outlined in our financial analysis spreadsheet. **Customer Benefits:** * Improve user’s online presence
* Allow users a cohesive view of their digital identity across different social media platforms
* Increased interview rates for students

**Potential Risks:*** Hackers that can generate fake or suspicious accounts (Cybersecurity threats)
* Push-back from third-party platforms (LinkedIn and/or Monster)
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| **8. Technology Architecture** |  |  The reason our solution will stand out is that our application is not only a prototype, but it is functional. In order to design it, our team will be using JustInMind for the front-end in addition to multiple APIs from IBM’s Watson. The mobile app will be hosted on Google’s Firebase platform to manage the server, database, authentication, and analytics. The data model for Google Firebase uses a NoSQL database to store and retrieve data. Noah Mercado will be taking the lead on the back-end development of the application focusing on functionality considering his strong background with APIs and programming. Ryan Pace is taking the lead on the front-end design portion of the prototype in JustInMind. To access these API tools our team will set up free test accounts for API tools and/or free trials when necessary. The full enterprise architecture diagram and data model can be accessed in the appendix. |  |
| **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  | Kim Eastlake | Project Charter & Status Updates | 8/29/16 | 11/10/16 |
| Analysis | Mia Jardine | Use Cases, Competitve & Financial Analysis | 9/29/16 | 12/1/16 |
| Design | Nodir Zakhidov | Wire Frames, Data Schema & Scenarios | 10/1/16 | 12/1/16 |
| Implementation: Construction | Noah Mercado & Ryan Pace | Prototype | 10/27/16 | 11/14/16 |
| Implementation: Testing | Noah Mercado & Ryan Pace | Prototype | 11/15/16 | 12/1/16 |
| Installation | Kim Eastlake | Website & Project Closure Report | 11/8/16 | 12/5/16 |