

Dylan Chance  
ISAT 348  
Semester Reflection

What were your expectations coming into this class?

My expectations coming into this class were influenced by taking 252 with you my sophomore year. I had a clear picture as to the nature and environment of the type of course you lead. I expected a higher level of independence as compared to other courses. I expected to set my priorities and to own my education. I also expected a higher level of collaboration with you when needed as compared to other professors.

What learning goals did you set for yourself?

My goals this semester involved my personal website in addition to the semester project. I wanted to create place about myself online where people could see who I am, what I'm doing and what I have to offer. For this, learning goals were: Setup a hosting service with my own domain, create the content to be hosted. For the semester project learning goals were: Understand the Model View Controller pattern, implement the Model View Controller pattern using Laravel.

How did your goals evolve over the course of the semester?

Over the course of the semester my goals varied a lot. A large chunk of the semester was spent in the pursuit of employment. I began using class time to update my resume, find and apply to positions, prepare for interviews, etc. This took a lot of time away from academics but helped me start my career.

My goals also evolved as I spent time and gave priority to the zome project. I wanted to make significant progress and to get some cool stuff working that I could show off. Even within this project my goals evolved. At first I was focusing on the getting the sensors working. This took a change of course when I reprioritized on getting the functionality working that the sensors would influence. This resulted in more time spent on software than hardware.

All of these other goals distracted me from the semester project. Originally my goals for the project were ambitious, but as time wore on became simple to the point of getting a small portion of functionality. Thankfully Ben worked very hard on getting up to speed with Laravel. With Ben taking the lead I tried to do my part with assisting him.

In what ways did you feel you were successful?

Please refer to specific, concrete artifacts that would serve as evidence of your successes.

While it is still very much a work in progress I was successful in getting my website off the ground ([www.dylanchance.com](http://www.dylanchance.com)). I was also successful in the job hunt and signed on for an analyst position next year. I made progress with the zome project getting simulation of my first scenario to work. I hope to get the sensors working for that over break. While the semester project does not include all of the features we intended there was success in being able to implement the Laravel framework.

In what areas do you feel you failed to achieve your goals? Please reflect on what you think you've learned from your failures, and what, if any, plans you have to address those issues in the future.

I would have liked to take things a lot further. For the amount we got done on the semester project in the time that we did it, I wonder what we could have achieved if we dedicated more time to it. There is also a lot left to desire with my website. The basic structure that I want is there but I need to take the time to put in all of the content. I also planned to implement the IR gates by now for the zome project.

In the future I would like to be more disciplined. It would be awesome to see what I can do if I dedicate myself. I also need to manage myself better so I do not neglect anything.

JMU's Mission Statement is to produce "educated and enlightened citizens who lead meaningful and productive lives."

Do you feel more educated?

I do feel more educated. I have done things this semester that I previously did not know how to do. For example I have made external hardware control a program on my computer. I never thought I would be able to do anything like that. I set up my own domain, which I have never done before. I worked in a totally unfamiliar environment in a language I don't know (Laravel/php).

I also learned much in the four other courses I took this semester and relearned a lot as a TA.

More enlightened?

I do feel more enlightened. I believe every experience I have makes me more enlightened. Specifically in this course I was exposed to new people and learned of their interests outside of school. Also I observed you and your interests and how many of them fall outside of your field. This made me think about what I enjoy and if I use my free time to pursue my interests. I'm fairly disappointed with myself in this aspect. There are so many things I would like to do and learn but in my free time I am just lazy. Sometimes it's good to be lazy but the

amount of time I spend relaxing, or rather the way in which I relax, is wasteful. I really need to fix while I am young. If I can't find the energy now, how am I going to do it when I am old?

Less so?

How have your activities this semester contributed or detracted from your knowing yourself better and having a better grasp on what you want to do in the near or distant future?

My accomplishments this semester have made me more confident in myself and encourage me to continue to take on interesting projects in the future that are outside of my comfort zone.

My failures this semester make me want to push myself harder in the future. I feel at times that I am not realizing my potential. When I put my mind to it I can usually excel at a task. Sometimes I wonder what I could accomplish if I truly pushed myself. But I also wonder if it is worth it and if I will be any happier because of it.

Professionally I do not have a much better grasp on what I want to do than before. Personally I know I want to improve my quality of life. Not that I am complaining, I know that I have it really good. However, I could definitely improve myself. I need to have no excuses when it comes to my health. I need to take time to learn desired skills. I need to make time for people I love. I need to enjoy myself. I do not know what I want to do in the future but I know I need to be doing something satisfying to me.

How did this style of course work for you?

It helped me in a lot of ways. The low level of stress was nice and allowed me to decompress. Unfortunately, high levels of stress in other courses took priority away from this course. I think this style of course would benefit from a fewer number of courses being taken as well as other courses also being in this style. I think this is a good format for upper level courses.

If you were to take it again what would you recommend that I do it the same or differently?

I think it is a good learning experience in terms of taking on responsibility and owning your projects. This will be a necessary skill in the future so I would recommend doing it the same.

What grade would you like for me to report to the registrar for you, and why?

"A", because it will help keep me in the Honors Program.

# ISAT 340/348 Narrative Essay

Morgan Benton

12/10/2014

Submitted By:

Justin Virga

I enjoyed the setup of this class and felt it beneficial to my learning. Allowing me to work on a project of interest to me while learning coding in the process was, I felt, the easiest way for me to learn. From word of mouth, I was aware that the classes you teach are organized in such a fashion in which you can choose your own grade, to my knowledge. However, with this being said, this is not the reason I decided to enroll in ISAT 340 and 348. I know for a fact that doing minimal work and trying ask for a grade that was, frankly, undeserving of my effort was without question not the path I was trying to take. I want to apologize for my lack of attendance some of the days throughout this semester. This was mainly due to the amount of work piling on top of me from my capstone, ISAT 253 labs and ISAT 433 projects. Trust me when I say I did work on my project outside of class and many times during the class periods at home. I did not want to give you the perception of a lack of effort. I feel that although I did have much else to accomplish this semester for other courses, I did learn a great deal.

A goal for this semester, as I have been wanting to do for a while, was to create a fitness website of some sort. The scope of the project broadened a little more than I would have thought necessary with the inclusion of music, while dropping a crucial component, statistics that users could follow. However, I do believe what the group accomplished was exceptional. I for one had little to no experience with HTML and CSS. To go from not being able to understand the code to comfortably changing aspects of our website provided me with a sense of fulfillment on its own. I know for a fact there is still much for me to learn as listening to Paulo describe different components and software constantly left me searching for answers. As the semester progressed I went from just wanting to know about HTML and CSS to researching databases, php, JavaScript, composer, and Laravel. I am aware I still know little about them all, but I feel a general overview for my responsibilities of this project was sufficient.

Another goal associated with the creation of this website was to learn more about HTML and CSS. As mentioned previously, I had practically no experience when it came to coding websites and all of the aspects involved. Using w3schools.com along with help from members in the group, I learned more about coding involved in webpages. I feel more at ease with the changes I make; however, still need much guidance in some areas.

As there were successes, there seemed to be about an equivalent amount of failures or areas that I felt should have been met. From the beginning of the semester, when the project first started to evolve in terms of what was to be accomplished, what programs would be utilized and the division of work, it seemed as though the project would be simple. This was most likely do to my naivety when it came down to the implications usually faced during coding and the actual effort and experience required to complete much of the work. In another way, the website became a larger project than I first intended. In addition to this the time it took for me to learn coding through w3schools and to regurgitate it during altering the website seemed as if it took weeks. Usually, I am the person who will

quickly pick up on topics that interest me, but the complications that arose during learning HTML and CSS were frustrating. Since the website template we decided to use was more elaborate than what I used last semester in ISAT 306, I felt lost in many instances during the project. Trying to decipher the code in front of me then locating the area to change in the project files was difficult in itself aside from actually changing the code. As in anything, however, the continuous application of my newly acquired knowledge finally began to produce results that I was happy with.

I did receive some beneficial lessons from the obstacles I encountered throughout this project. The main lesson was to start small and make sure the entities of the project were the best they could be before moving on becomes an option. This could have made the project run more smoothly if all three of us were working on the same component. However, each person would be assigned to their own aspect such as me altering the CSS, Kyle the functionality, and Paulo as an oversight. Paulo had the knowledge to complete much, if not all of the project on his own unlike the Kyle and me. This would have aided us in learning more as well as increasing what we would have accomplished. A huge reason behind working on parts of the webpage together is to have parts of the webpage fully completed instead of many components partially done. Starting small and then increasing the scope as areas are finished should have been the route taken. If I'm going to continue the project after the end of this class, which I plan on doing, I will devote my attention to one part of the website in order to ensure its functionality is complete before moving forward.

Another lesson I learned was that my full attention need to be devoted to coding. As common sense as this is, it played a large role in how well I retained the information. While learning aspects of the coding languages, I felt comfortable, but would take a break and then try to make the same types of changes to the website. Unfortunately, by this time I had already forgotten what I learned which cost even more time because it needed to be reviewed. Coding is definitely a topic that requires undivided attention to master, but with the amount of projects and homework needed to be completed weekly, it was difficult.

In response to JMU's mission statement, I will divide and answer the educated and enlightened question accordingly. First and foremost, education is, in a paraphrased form, receiving training in or information on a particular field. In this definition, I feel this semester has provided me with education in the computer science field. As I have stated in a couple of the previous paragraphs, I have, without a doubt, learned a great deal of HTML and CSS from where I was before the semester started. Without any previous knowledge, aside from a partner explicitly explaining how to alter a code, I knew little to nothing. Honestly before last semester, I always believed webpage design was a point and click operation that could be completed in a couple of hours. After this semester especially, I have obtained a new found respect for people who code, in terms of the ability to sort through thousands of lines of code and the patience allowing them to do so. The sense of

enlightenment I have received from this class is not from the work done within the class, but rather the continuation of meditation outside.

I have previously meditated to reduce stress; however began to meditate daily to every other day. I find it gives me time to ease the tension I'm feeling under constant pressure of coursework. The outlook I have received from the obstacles I have encountered through either school life or life outside of the academics is more positive. Previously they were treated as simply something that needed to be overcome quickly without looking back. Now I tend to reflect on what I actually learned from the experience. For example, this semester there was one week in which the amount of coursework needed to be completed was ridiculous. By this I mean, three tests, two project reports, a lab report for 253, two internship papers, and a few homework assignments to fill in any gaps. Without a doubt, one of the most stressful weeks in my college career causing me to stay up to 3am on numerous occasions. Finally, getting through the week and miraculously finishing everything, I looked back on what was accomplished. I found that I was successfully able to utilize all the time available and not only complete the work but receive results above average. I was able to decide on which assignment's completion was of most importance and schedule out the time they needed to be completed. This is just a small example of a change in the outlook I have taken from this semester. Although I am slightly upset it took me this long, I can apply it to future obstacles. In addition to this, I feel that this course has helped me in narrowing down my future career path.

From this class, I have found that coding does not fall high up on my list of future career possibilities. I do not have anything negative to say about it, except that it is not my cup of tea. The knowledge I can gain from it is beneficial to my future in engineering, but me being strictly a software developer or coding for a living is not an avenue I predict myself pursuing. With this being said, I will probably continue small projects on the side including this website project. I want to pursue a career using my double concentration in which I am not always behind a computer. I know computers will be used everywhere I decide to go, but being able to interact with people face to face more often is the route I'd like to travel. In addition to this, I was enrolled in a project management course this semester. This is more of the career path I'd like to pursue. There is something about planning and organizing a project while interacting with people that catches my interest. I chose the I&M and E&M concentrations because I feel in many ways they can work hand-in-hand; however, the E&M concentration is more of what I am leaning towards. Overall, I enjoyed the challenges associated with our project and the knowledge it provided. Maybe after I continue this project and obtain a better grasp on these programming languages my thoughts will change.

The course style was advantageous in that I could learn programming languages while working on a project that I have always wanted to do; however, it has its disadvantages. With the choose-your-own-grade, as you have already pointed out, people tend to put this on the backburner. In addition, many students decide not to use this



opportunity as a chance to learn, rather as a time to slack off. I put in as much effort as time allowed, but there were periods this class was put behind others for the fact that other classes had deadlines that could not be altered. If I had more time to put towards this class then I would have received much more out of it. I feel in future classes, having an evaluation of each groups' project would be better. Each group would give status reports on where they are each week or every other week and then a grade will be given based on completion. This would take into account issues faced as well. Similar to capstone projects and the ISAT 306 class, it pushes people to meet each deadline and from my experience is even more beneficial.

For the registrar, I would like to receive an A for these courses because of what I have learned throughout this project. I understand that not every class period I was present, but this was mainly due to being either in the 253 lab, in a capstone meeting, or working on assignments for other classes. I am not a person that is known to take the easy road. When I was in class, I worked from the moment I walked in right up until I needed to leave. For what I was able to accomplish with the little experience I had prior plus the other coursework, I feel content. I would have liked to finish the project and have a more confident foundation regarding HTML and CSS, but with time constraints I was unable. With what I did learn, however, I am able to take with me.

Kyle Malik

James Madison University

### 348 Final Paper Assessment

This semester I have learned a great about myself and what type of work I am capable of producing in the application-developing field. My interests have always been in Information Technology/ Coding fields but until I have taken this class I found the process to be much better than my previous experiences. Coming into JMU as a computer science major I found that producing code in the way that the teachers expected was not enjoyable an made coding a nightmare and not fun. After coding throughout this semester I was able to regain my positive outlook on coding and application development.

My learning goals coming into this class were to learn more about my learning style, learn more languages/concepts, frameworks, to try some new things, and gain some more exposure to working in groups. Through my group work I wanted to learn how to use revision repository software. This was the first semester that I gain some exposure to revision tools in code creation. At first I was very confused by how Github worked but after using it for the semester I got acquainted with it fast and I now think that it is a great way of getting input from others on your style, concepts, and errors that you may be having. It is always good to have another set of eyes looking at your code, which helps when unfound errors arise. It is also great because it gives you a sense of community within the coding world where everyone is willing to help dedicate their time to topics they are interested in. It is also a great way to brainstorm and spin off other people's ideas making for more complete projects. The sense of community is very different then the repository that we were required to use 345 Software Engineering class. We used a SVN repository where the revisions only took place within the team and not the outside. I also like using repositories now because I like to try new things and if I do make a mistake I can always revert back to the older version on the code that I had committed.

Another one of my learning objectives was to learn new languages and polish some of the old ones that I have not used in a while. Coming into this semester I knew little to none about PHP and JavaScript. The majority of our project used PHP and it was a great experience being able to learn some of the syntax as well as add it to my set of skills for coding applications. We also used some JavaScript in the calendar section of the Planned Fitness application. It was interesting to see how JavaScript was used to create some the actions within the calendar and manipulate them in order to make them do what we needed them to do for our app. The drag and drop feature for the workout creation was one of the examples of JavaScript use within that page. While creating this application I was also able to polish and learn a bit more about HTML and CSS. Working with both Paulo and Justin we were able to create a nice looking front end in order to attract potential users to the site. Through using the template that we selected and reading the code I was able to understand

more about HTML that I was not aware of. Being able to read code is a extremely valuable skill to have and having read through a lot of the code I have been exposed to new concepts.

I was also able to learn more about MVC (model view controllers) framework. When I first started working on this application I was confused on the way that the framework actually communicated between the different layers the model, the view and controller. After working on this application I was able to visualize how each of these worked with each other and communicated with each other after manipulating code in the files. As well as working on code in a group was a new skill that I needed to learn and I believe that through the Github repository we were able to pass code and revise easily. In the past I would work on code and complete the projects on my own because of the independent side that the computer science department beings to its students. This class really taught me how to work on a team in a coding environment because this was a foreign concept in the past.

During the semester I believe that my goals remained the same. I wanted to get as much exposure to this type of work as possible. I would really like to pursue a career in application/software development as well as frontend development. I have always had an interest in database work. Bring all of these skills together would make me much more marketable to employers. That is why when I set my goals in the beginning of the semester I thought about what job I would like to have in the future within IT. Then sought out and looked to master those skills because I would likely need them in the future.

The areas that I feel that I failed in were giving reasonable timetables for my week-to-week task. Some of the tasks that I was taking on were too big for me to take on in one week. I should have broken down the problem that I needed take care of and then complete each of the tasks in order. The topics that I would put down on the weekly evaluations were very general and broad giving myself a lot more work than I had originally thought. Another one of my failures was catching up on the reading or finding sources to read that I understood. When learning MVC frameworks for example it took reading a good amount of sources until I was comfortable understanding how the whole process worked. I also wanted to find a way of organizing my code so that it was less messy. When using the MAMP server throwing my code into the htdocs folder actually made the code feel less organized because the way that I wanted to have the code would be in my schoolwork folder. Since htdocs is in the MAMP application folder I have to transfer my code later on to that folder if I want to go back to it because we did not go live with our project we kept everything local to our own machines.

Based on JMU's mission statement "to become educated and enlightened citizens who lead meaningful and productive lives" is a statement that I feel a lot more comfortable with. I feel that I have become more educated in application development in that I was able to get a hands on approach to development from the ground up. None of my previous classes at JMU or within the ISAT department

allowed us to just complete a project for a grade. I like this approach to grading because I feel that I learn better by actually completing assignments and getting my hands in the project. I am not a fan of testing because regurgitating information I feel is pointless if I am going to forget it a month later. Doing hands on activity and problem solving allows me to ingrain concepts into my brain. I will be able to recall them much better. I also feel more enlightened after this semester because of the way that this class was set up. This has given me a different outlook on how grading should be. I have never been able to pick my own grade to assess my own work in the class, I do like this approach but that is not the only why. Taking a look at yourself and being able to honestly assess what you have accomplished is somewhat fulfilling. This class has also given me a new outlook on how classes should be, in that classes can be project based and you can still learn information without tests. I therefore think that this style of coursework was a much better way of assessing abilities as a student and gaining more knowledge about a topic that I really do enjoy again.

I don't believe that my activities this semester have knowing myself better in fact I believe that it has done the opposite. I believe that I have confirmed a way that works for my learning style and that is project based classes. I knew that I performed much better projects as apposed to tests. I have more time to take care of problems that arise as well as nerves don't come into play. I believe that after taking this class and software engineering I have confirmed the field that I want to pursue as a future profession. I have been interested in database work for a long time but I have gained new interests in frontend development as well as well as how the frontend and backend connect to each other is extremely fascinating. I have confirmed that Information Technology/Coding fields is where I want to be when graduating and focus on jobs I believe won't really feel like a jobs.

Looking back on this semester there are some things that I wish that I had differently. One of them being able to gage how long a task will take based on my current skills and ones that I need to learn. For the ones that I need to learn I need to give myself a few hours to sit down, learn what I need to for that task, and complete said task. I feel that doing this process all at once really allows me to learn the topic. I read about it then do the hands on seeing what I just read about happen in front of my eyes is exciting and a habit that I want to continue into the future.

I believe after a deep reflection on what I have accomplished and the knowledge I have gained about myself that I deserve an A grade for this semester. I had a hand in a little bit of everything that this application has produced and I am extremely proud of what we were able to accomplish. I am also proud of what I was able to learn in just a semester's time and gives me some more motivation to create new ideas on my own over the winter break in my spare time.

Megan Monter  
ISAT 348 Narrative Essay

Expectations:

- My only expectation for this class was to become more familiar with web application design. I already knew that this class would not be lecture based and therefore the stuff that I would learn would be unique to my personal project and weekly goals. Also because I chose "pick your own grade" I expected to have an end of the year meeting with you discussing the semester but knew I did not have any "real" due dates or deadlines in order to acquire points.

Learning goals/evolution:

- My learning goal was to complete my capstone project therefore each week I had new learning goals and deliverables. After a while into the semester we realized we didn't need to finish the project by the end of the semester which did relieve some of the effort I planned to put into the project this semester and made my weekly goals reduce. This course was slightly different for me compared to the class because some of learning goals were off topic. Some weeks I was working on implementing the survey and then analyzing the data instead of focusing time on making the web platform. Even though my learning goals were not as holistic as the rest of the class I still feel I had success.

Success:

- I feel more secure with my capstone project and how to put it together next semester. Coming into this semester I was definitely concerned that my lack of programming skills would hinder my progress with the project but after watching Kyle and you troubleshoot many lines of code and Google a lot of important information I realized I could also construct a website or app with some trial and error.
- Kyle and I successfully received data from our qualtrics survey and can use that information to write and publish our paper.
- We have also successfully begun making our web application by figuring out the "home page" of our website.

Failures:

- I failed at managing my time. I had more time to focus on my project than I made myself utilize. In the future if I have a similar situation I will make a plan for myself for the whole time allotted and space out when I should have stuff completed by.
- I have also learned that programming is more successful when you have a lot of concentrated time at once instead of a little bit everyday. I will allot longer time periods to work on my project over a weekly basis and not wait until the last minute to try implementing something.

- Sometimes I would leave meetings knowing what I needed to complete but once I actually sat down to do it I would not know where to begin. To avoid this in the future I will ask more questions about where to find things or what books would help jump my learning curve since I don't have a strong coding background.

#### Feeling more/less educated:

- I do feel more educated but I also feel I as though I will "complete" this course next semester when I have completed my project. I work better when I have deadlines and incentives and since my deadline was changed I do not have a completed project.
- I can better understand what code lines are implementing

#### Getting to know myself:

- My hobbies do not include programming so I find myself spending time on other things like running, hiking, hanging out with friends, and Googling homes in San Diego than working on the website.
- My activities have definitely helped me get to know myself. I have always known that I was good at math and science so I have always pursued education in those subjects. I am finding that they are not my real passions though so I still need to figure out a way to make what I am learning meaningful.
- Introductory programming classes were fairly easy for me and therefore I ultimately chose IKM as my concentration. I have always enjoyed technology and therefore thought that if I was more educated in it I could find a respectable job. I have learned over the years though that I do not want to go right into a corporate job and instead want to travel around the world and live in different places instead of living somewhere for a job.
- I am hoping that in the future I will be able to use my degree to my advantage such as programming remotely while I travel around.

#### Course Style:

- I already knew that this learning style would be harder for me to push myself to work diligently. I spent a lot of time deciding whether to choose the points system of grading or choose your own grade for the semester and ultimately picked choose your own grade because you have the option to move to the points system but not vice versa. If I could take the course over I would probably choose the point systems since I think I have accomplished a lot in Radziwill's 344 class this semester. I also had a partner though for my project so it would have been best if we had the same grading system for the semester so we could both be held to the same responsibility.

#### Grade:

- I would like an A! I was happy with my overall progress and tasks for next semester.

My expectations and learning goals when coming into ISAT348 were to refresh my skills in Laravel, and gain new skills while completing a semester project. I had a decent grasp of Laravel basics from 340, but after taking a year off, I realized I did not know how to do much with it anymore. As for the new skills, I had wanted to learn a non-coding ability, and so I eventually set on learning Sketchup, which would help with the zome structure.

Over the course of the semester I began to move away from trying to relearn Laravel and focused more on using Sketchup. This meant most of my time was focused on learning this new software, leaving the semester project as more of a minor task. I know that this was not my intention for the class, but as the semester went on, I was more interested in the zome structure than Rendezvous. However, Ben maintained good progress on the project, and kept me well informed. This is why towards the final third of the semester I was able to still help him and Dylan complete the project. Though I did not deal heavily in the physical coding of the different sections, I was helpful in planning and troubleshooting as we proceeded. Since I had completed a project in Laravel before, the group would often ask my opinion to overcome an obstacle we were facing, since I had dealt with it before. Sometimes I would be able to help him in this, and other times I would need to do research. Also, as the semester was coming to an end, I focused most of my time with Rendezvous and was able to actually help create some of the sections with Ben and Dylan, specifically the sections that dealt with the pivot table.

Judging from my progress with the zome structure, I'd say most of my time was well spent, since I had to both overcome the learning curve of new software and creating a structure, which I had never done before. I do feel that I let myself down when relearning Laravel. I was able to reteach myself enough to follow along with our project, and offer helpful advice and code correction, but I do not think my abilities allow me to complete such a project on my own. In the future, I do intend to go back and relearn Laravel; after using it with two projects I realize how strong of a program it came be and the potential benefits it can offer in the future.

Overall, for Rendezvous, I feel that we had an almost complete project. The application's users were able to be created and stored, events were able to be planned, and the pivot table combining them was finally finished and operational. Even the forms were robust, and forced the user to fill in the fields correctly. In my opinion, the only part we fell short on was making the app send invitations through a SMS. This was because we needed to make this section last and we simply ran out of time. Along with this, it involved additional software, which we needed to acquire and learn. If we had a few more weeks, I'm sure that Rendezvous would be mostly operational, at least for testing purposes.

I would say that I have come out of this course more educated. I feel that I have gained a mastery of Sketchup that will allow me to use it for a variety of reasons. Though my presentation on the software may not have been the best, I feel I can do more with the program than I am able to demonstrate in a confined time slot. I would say that in terms of the zone, I am more enlightened. From the beginning of the semester to now, I have gained a better understanding of how I need to go about building the structure. I have faced many obstacles and walls in my progress, which has forced me to either overcome or find new solutions. Because of this, I feel that by the first few weeks of the spring semester, we should be able to print the pieces to assemble the structure.

Personally, the activities I have completed this semester have neither confirmed nor denied what I want to do with my future. My eventual goal is to find a career in cyber security, which means that I need to gain the skills to first gain entry into a company. Once I have secured an entry level tech. positions, I want the company to fund my certifications, so that I may then go into the security sector. This course was a good way for me to recognize which skills I still need to work on/ gain, so that I may eventually reach my end goal.

As always, I have a hard time when it comes to regulating my own work flow. I tend to procrastinate, and then use the pressure of an approaching deadline to complete all of the work at once, even though I could have made steady progress the entire time. I started out this way at the beginning of the semester, but I have started to correct my problem. I now give myself tasks to complete, with a set deadline. I do my best to hold myself to these deadlines, in order to keep myself from rushing at the end, and producing a less than adequate final product. So far, this has allowed me to stay on track, and keep my progress steady.

If I were to retake this course again, the only thing I would change would be bi-weekly meetings with you. I know that we could have done this anyway, but it would have been beneficial to make this pseudo-mandatory. The meetings help us, as a group, stay on track and make sure that the goals we have chosen are in our best interest, and that we are making the best decisions to when finding solutions to our problems.

I would like to receive an "A", for this semester. I feel that I made a lot of progress, and gained new skills from my time in this course, even if the two were directly related. Courses that force me to regulate my own work flow push me out of my comfort zone, but I feel that I have used my time in an appropriate manner on the tasks that I have assigned to myself.



Ross Ellingworth  
Narrative Essay  
ISAT 348  
Dr. Benton

Going into this class I had the expectation that I would have to be very self-motivated as that is the structure of this class. To maintain this motivation I decided with my group that it would be a good idea to try and work on our senior capstone project in the class. That way we could focus our efforts and work toward a common goal, which would keep us all motivated. Personally I also had the goal that I would try to understand the backend structures of an application. This is because I just came from an internship where I worked extensively with data mining and really ended up understanding the ins and out of SQL databases. However, a lot of the developers spent time building API's and that was a topic I had virtually no experience in. So my goal was to really try and understand the nuances of API's and how to build one.

In this course I feel I was successful in accomplishing my goal. However, I did it in a roundabout way as I tried to find the tools, and languages I enjoyed programming in. As the course was suggesting mySQL (technically MariaDB) and PHP I started with those tools. However, my goals began to evolve as I decided to change tools. I really did not enjoy PHP's syntax, nor the requirement to have to set up a web server, and then get the database integrated with it as well. I wanted a simpler solution instead. After about a month of messing around with PHP and MySQL I decided to try Ruby on Rails. That lasted for about 24 hours as I realized Dreamhost had very outdated support for Ruby on Rails applications. I then decided to keep looking, and I stumbled on Node.js. What blew me away with Node was how accessible the language was for me, since it was just JavaScript (which I know pretty well). On top of that I loved the fact that I could have total control of everything on the server. I could build a web server and API all in one. It might sound like it made my tasks more complicated, but because of the Express 4.0 framework it was all relatively easy and for some reason everything just started making sense. Now that I had a set of tools and a language I could really get behind I began moving all my goals to encompass Node.js rather than PHP. I started writing some tests, and then jumped into setting my goals to make a restful API for our Textbook Exchange Database.

My successes were hard fought and took a lot of time. I managed get the API partially functioning. I also began working with a NoSQL database called mongoDB rather than MariaDB. Using the mongoose package I could create schemas for the database and modify them on the fly, as we as a group, continually reworked our database to reflect our needs on the front end. We ended up with three schemas: a user schema, a textbook schema, and a courses schema. Each schema included some of the same fields that could be found in the other schemas. That way each schema could be related to each other much like a standard relational database. On top of that I managed to build a working connection between the API and database. So by the end of the semester we can now add fields to the database. These were major accomplishments

especially considering I was using tools I had not used all that extensively (if at all), and I was also building things I had never really built before either.

There were many difficulties along the way. I tried getting passport to perform the user authentication and creation however that was rather difficult and I still haven't figured it all out yet. Passport seems to have been set up alright however for some reason or another it cannot seem to read the values that are sent to it via the post requests. This was a problem that was consistently occurring in both the authentication and user creation steps. It may be nothing that is my doing per say and could be a bug in the software, but I was never able to resolve the issue. Another major failing I had was in my time management. I really underestimated how long it would take me to build an API. I assumed it would be relatively easy, however there is a lot of subtle nuance to API development that makes it much more complicated than querying a database or inserting data into a database. An API does also have to worry about security, and sessions. Since I was never able to get passport working I never was able to test whether my implementation of sessions worked properly. And to be completely honest I am not completely sure I understand exactly how it works. I have a working knowledge but until I see it in action, working in my code I am afraid the specifics still eludes me. I also mismanaged my time on many weeks as I had lots of work in other classes, and since this class did not have a hard deadline there were some weeks I did not accomplish as much as I would have liked because of that.

These failings taught me a lot though. I realized I need to work on my time management skills some more. I also learned that I needed to set more reasonable goals that would let me actually complete what I set out to do rather than getting bogged down in problems for too long. That means I may need to set out to ship my efforts when I get stuck to either build some momentum or at least push back on myself so that my goals are set in a manner that is reasonable. I haven't figured out the best method yet, and unfortunately it will probably require me to fail some more before I can actually find the solution to that problem. Time management is an important skill and I plan to focus on that every time I get an opportunity (which let's be honest is every day). As for fixing my programming failures I believe that having better time management helps, but I also think that now that I have a better understanding of what kinds of tools I like using I can really focus on using those tools and not waste as much time playing a game of trial and error. This will end up helping in that I can build up mastery in a certain sets of frameworks, tools, and languages. It also means that hopefully soon I could begin to be in a position where I know enough that I could start teaching people. They say that that's proof when you really know something, and I feel like by getting to a point where I can truly collaborate with people my abilities will really take off, and could help me resolve some of the issues I highlighted before.

At the end of this process I do in fact feel more educated and enlightened. I got an opportunity to work on a project that gave me the freedom and the tools to experiment and try new things without having any bad repercussions because of it. Due to this I found it possible to use languages, and frameworks that I had never used before. I also ended up using one of the

things I really wanted to try and that was to use a NoSQL database since it seems to be all the rage lately. This also showed me that although I do like many of the aspects of programming, I am not sure I could work in an environment long term where I have to use the same required tools as everybody else. Maybe it's due to my stubborn nature, but I'd much rather try to figure something out that's brand new and risk total and utter failure than use the same old same old. This confirmed my belief that whether its right or wrong, I need the opportunity to bumble around steeped in complete ignorance and figure something's out for me so that I can get a better understanding. With that understanding I can then move forward and actually begin meshing it with the things other folks have found, and techniques they have used.

I liked this style of course all in all. I would like to have some more direction on certain topics throughout the class; however there was rarely anything I could not find the answers to for myself. That being said I do liken how you learn in this class to how I learned to produce music on my own. Because this class is self-motivating you have to find a project, and language your passionate about. If you don't like your project you'll never end up wanting to work on it. This will hinder your learning process. But it's also just as important to make sure you pick tools and languages you like as well. You may simply get discouraged because the language is daunting or hard to understand. When I first got started producing music I downloaded the demo version of every single DAW on the market at the time. Much like picking the right programming language, the right DAW can make or break your learning experience as a producer. The next thing I did was that I picked a remix project based on a song that I really liked. Since both the tools and the project were working together, and with me I was able to learn and enjoy the experience.

If I had to take this course again I think I would make sure that I get started a bit earlier. We lost about two weeks because of Dr. Benton's trip to Burning Man. This was tough because of its timing. Since it happened in the first two weeks we didn't really accomplish much. But knowing what I know now I would have been much more active and gotten started right away. Once I got started I ended realizing that I had a lot of work in my other courses. Getting started right away would have probably helped with my time management and progress throughout the semester.

As for what grade I feel I deserve. I believe I deserve an A for my efforts. My team and I worked together really well, and considering our project was scoped to be done over two semesters I think we accomplished a lot individually and together. We ended up with a partially functioning API, a completed database, and a completed frontend with JavaScript as well. I know some groups made more progress, but I set us on a different path than most. We ended up using tools that aren't necessarily widely adopted yet. For example, Node.js was first launched only 5 years or so ago, and when it comes to programming languages it's a very new language. So when you consider the fact that we all got exposure to new tools none of us had used, and we made quite a bit of progress on our project I would consider that a great success.

Colin Sheehan

ISAT 348

8 December 2014

Narrative Essay

When I chose to declare Information and Knowledge Management as my concentration for ISAT, I knew ISAT 348 would be a class that I would enjoy just based on the course description provided by the ISAT website. The description seemed to suggest that the course would consist of building applications through code and presented the opportunity to be creative in a way other ISAT courses do not. This creative aspect is what attracted me to the course and the IKM concentration in general.

Entering the class, I had the expectation that it would be much different from the "usual" college course. I was told that you choose your grade at the end of the semester and this seemed peculiar to me and honestly kind of scared me because of the opportunity it provided to "slack off". This being said, I knew that the pressure of failure was removed and would allow for a more laid back environment where creative experimentation and learning was free from fear of error or failure. I have always learned things better when self-taught, especially pertaining to topics I enjoy and topics that involve creativity. I figured the freedom offered in this class would allow the opportunity to learn in this manner and I was not wrong.

My primary learning goals for this semester were to become more familiar with application development, learn and have a good understanding of the technologies relating to development (primarily the basic client-side standards, HTML5 / CSS / JavaScript), and to become overall a more proficient programmer and developer. As the semester progressed, I found that front-end web development was something I actually really enjoyed. I was attracted to the fact that I could code and build something that had a visible result. This was the creative aspect that I was drawn to. It provided me with a sense of accomplishment and joy that made me want to learn. As a result, my goals were aimed more towards this topic as the semester progressed.

I feel as though I was most successful in achieving my goals about learning front-end web development. This course allowed me to focus more time on my senior capstone project. For my senior capstone project my group and I are creating a web application that allows JMU students to buy, sell, and trade textbooks to one another. The primary purpose of this project is to create a medium that connects students and eliminates the need for a textbook distributor that often sells overpriced books. Being able to use the capstone project as the project for this class was extremely beneficial. It meant that more time was available to get a better grasp on the concepts and technologies relating to the project that were completely new to me at the beginning of the semester. I was able to play more with the design of the website and learn more ways to improve the overall look of the site. Although I feel I was successful in this aspect,

I wish to eventually change the design and create a more modern and interactive design that uses the newer functionalities of HTML5 and CSS3.

Throughout the semester I found myself programming and playing with code for fun. I spent a large amount of time using the HTML canvas element along with JavaScript to manipulate and write code that created interesting visual graphics similar to something that could be used as a screen saver. Having the ability to code something and then see a working visual display of it gave me a sense of satisfaction that pushed me to spend hours coding and experimenting with code. Although many of the programs had no desired end result, goal, or purpose other than to offer personal enjoyment, I feel as though the time spent working and playing with them has made me a better programmer. For this reason I would say I was successful in achieving my goal of becoming a better programmer.

Relating to the topics of the labs, some other aspects I was successful in were: using Git and GitHub, launching a website using dreamhost (sheehacm.com, the site is an example of one of the things I did for fun using canvas), using and learning frameworks (Bootstrap, JQuery, JQuery UI), becoming familiar with AJAX and JSON, learning about NodeJS and mongodb, and server side languages. I often used online resources such as w3schools, codecademy, and other sites found on r/webdev from reddit to guide my learning throughout the semester. While I feel I was successful in this course (more so than I anticipated), upon reflecting on the whole semester I have realized there are some things I should have done differently.

I have realized that one of my biggest flaws this semester was my inability to stick with a project or program I was working on and actually complete it. I would start working on something and have an idea but would often eventually find a different or new thing to work on and never go back to completing the previous task. I wish I had spent more time focusing on a work at task and completing that work rather than getting distracted and start working on a new idea. Although this allowed me to learn more material and try out new things I learned, it prevented me from mastering certain concepts. Another thing this semester that I wish I had done differently was to make better use of class time. I would often go to class and just work on whatever it was I was working on at the time and not make use of the resources offered during class. I wish I had followed your project guidelines and advice more often rather than just doing my own thing and trying to figure concepts out on my own.

Recently I have found a new website ([www.theodinproject.com](http://www.theodinproject.com)) that is designed to teach you web development through an organized course structure. The website states "if you want to learn web development, you've come to the right place. We found the best free resources out there and grouped them into the courses listed below so you don't have to waste time doing it yourself. We've also created projects for you to build along the way so you can really learn the material and boost your portfolio." I have started to take the course and have found it to be unbelievably helpful. I wish I had found this site earlier this semester and used it as an organized way to learn the material in a more efficient manner. I plan to still complete the course over winter break and use the knowledge to keep working on web development.

Overall I believe this class was very meaningful and beneficial. In other courses I often find myself not actually learning to learn but instead to receive a certain grade. For this reason,

a lot of the material I learn in those courses is not retained and is forgotten. Having the complete freedom to learn what I want and how I want without the stress of being graded was awesome. At the beginning of the semester I was afraid this freedom would cause me to slack off and not actually learn anything but this was far from true. Maybe it is because I am actually interested and enjoy the material covered in this class, but I found myself learning because I wanted to learn and enjoyed it. I would say that this class has contributed to me having a better grasp of what I want to do in the near future and possibly the distant. After taking this course, I discovered that I really enjoy web development. I have always loved things that involve creativity and for myself, doing creative things and being creative is what makes life enjoyable and meaningful. I find that joy in the creative aspects and problem solving involved in web development.

I have recently applied for an intern position as Junior Web Developer at GroMobi in downtown Harrisonburg and believe there is a high chance I can work there next semester. As of right now, I hope to pursue a career in web development in the future and plan to continue learning and working on my own to become more proficient and start building a portfolio. I believe this course played a major role in introducing me to the web development field and the relating material. Although this course style may not work for everyone, I think that it worked for me. As a person who learns well on their own and enjoys the freedom of self-teaching, I really enjoyed this class.

If I were to take this course again there are a few things I would recommend that could be done differently. One thing that I noticed throughout the semester was that the labs provided in the course website were mostly blank. I think it would have been beneficial to have recommended information about each of the lab topics such as relevant websites for learning or relevant videos. I found the videos provided in the earlier labs were very helpful for understanding the relatively new concepts in an easy way. For me, the shorter videos (5-10 minutes) were extremely useful and easy to learn from. Another thing I would suggest doing is having maybe some small lectures or showing the class some interesting relevant material during class. I really enjoyed the relaxed open lab environment of the class periods and would not recommend changing that but I think providing additional cool material to the class during the class period for those who are interested could be beneficial. Overall, I think the class is fine just the way it is.

The final grade I would like to be reported to the registrar is an "A". I find it strange having to grade myself and ask for a certain grade but based upon the enjoyment I got from taking this class and the amount I learned about not only the material but myself and how I learn best, I think it is appropriate. Sometimes I seem to struggle to motivate myself to actually learn for certain classes, but for this class it was fairly easy to maintain a desire to learn the material.

ISAT 340 & ISAT 348

# Final Narrative Essay

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Paulo Dorado

12/8/2014

ISAT 340 and ISAT 348 are the classes that I stumbled upon when I researched about what classes to take during the last semester of my college career. Just like the description of the courses, I expected the classes to be software and web design with an emphasis on development. I felt very excited for these classes since the focus of the classes is creating an application that is potentially useful for most people to use. In the past courses that I've taken as a Computer Science major, we usually create applications that are mundane, however, they help us understand that concepts of programming. So, when I added ISAT 340 and ISAT 348 into my schedule, I looked forward to creating applications that I wanted to create.

My learning goals for the classes ISAT 340 and 348 were learning more about the three parts of application development: backend, middle, and frontend. I took a few ISAT classes last semester and it was a shock to me that I didn't know much about backend and middle parts of application developments. I wanted to focus more about knowing what to use and how to use certain applications, database, and hardware. However, as the semester progressed, I realized that I wanted to learn about middle and frontend developing more than I wanted to learn about backend. So, during mid-semester, I switched my focus on those topics.

During this semester, I also had a pleasure to work with a team. Kyle and Justin were part of the project I was developing in class. Unfortunately, I overestimated their knowledge in development. I didn't realize the Kyle and Justin barely know website development in terms of CSS, Javascript, or PHP. They also have limited knowledge in software design and architecture. I had to reshape my goals, once again, to integrate the goals Justin and Kyle had with the classes. At this point, I wanted Kyle and Justin to learn what they can in the class in terms of web development. I wanted to be able to teach Kyle and Justin more HTML, CSS, Javascript, and PHP through the use of the Laravel framework and creating pages for the website.

With the goals in mind, my team started developing the website. After the first day, I was able to set up the dev environment for our application. I was excited to start on the project. I notified Kyle and Justin to set up their environment as well. In the next two weeks, I was able to get Kyle and Justin to see my vision for the website and get them started on their first few assignments. At this time, we have picked a template for the application. From here until the end of the semester, we have started developing. Kyle and Justin were in charge of creating the pages for the website and making it look beautiful in design while I did the server-side coding making sure the core functionalities of our website was working.

In terms of success during the semester, I have reached a few mile stones during the semester. I learned more about Javascript in terms of object-oriented programming and the use of JQuery. I felt that this was important because it help learn more about



how I can better assimilate server-side languages like PHP into the web pages using Javascript. I also learned (more in depth) about coding in PHP. Laravel is a great framework. I had a lot of fun with it and I am grateful that I was introduced to it. It helped me better appreciate the MVC framework and help me learn more about software design and architectures. By learning more about the laravel framework, I could see that it was possible for us to achieve some of the goals we intended to do.

In terms of failure, I had a few that happened in the semester. I didn't take into account that Kyle and Justin may be extremely busy this semester. Because of that, they rarely had time to meet after class to talk about the project. As a team lead, I failed to schedule as much meeting time after class as I wanted. There were also goals that I couldn't meet in terms of the application development. I finished the core functionality of the calendar, but I couldn't include the features of the website that I was hoping to have. I overestimated the amount of work that set for my team. I had to reshape our goals as a team to accommodate for Justin's senior project and Kyle's busy schedule. Experiencing these failures made me realize that I should learn to overcompensate for time. The next time I prepare a project schedule, I need to accommodate for unexpected events that may cause delays in the project. Before I create the project schedule, I would also like to start getting the schedules of my teammates and incorporate them to the schedule so I'll get a good timeframe of when certain parts of the project may be due.

After experiencing the class this semester, I feel more capable as a developer. Learning more about software development on my own opened doors of opportunity for me in terms of what I can do. The laravel framework I learned to use this semester is great vehicle for me to explore more about middle and frontend development. With that said, I also feel more educated. I was able to deepen my knowledge of PHP and Javascript that I can now better manipulate data to apply them appropriate in web pages. As for everything extra, at the beginning of the semester, I was introduced to meditation and how it could me do my work. I was amazed of how rested I feel most of the time and I meditate at least three times a week now. It helps me rest and reflect on what I've done so far like giving my brain time to recharge a bit before resuming work. I'm glad that I was introduced to this technique of keeping my mind rested and focused.

As for the activities that I've done this semester, I've done a ton of software development not just in class, but outside class as well. I work the Center for Innovative Technology (CIT) and I have deliverables that I usually work out throughout the week. I also have programming assignments that I submit to my computer science professors. So, usually, my week consists of my working half the time and focusing my other half to school work. However, most of these assignments and deliverables contribute to what I wanted to do in terms of software engineering. I wanted to become a full-fledged programmer with a focus on desktop, web, and mobile applications. Since I've been

working on CIT work throughout the semester, going into the company as a full-time employee will not be a problem since I know my role in the projects that I'm in. However, I hope to, one day, work for myself. I like to have creative freedom in my projects. Being able to work in the right conditions and environment is also ideal for me as well. With the new-found knowledge in development I learned this semester, I'm better prepared to start my own projects outside work and take steps to my dream of becoming self-employed.

As for the style of course work in this class, I like how the class is designed since I get to study and develop applications that I want to develop. The way that the class was designed works with me since I can work my project whenever and wherever I want. Morgan is there to help me when I can't figure out a certain feature of an API like JQuery. With resources available to me, I'm able to develop effectively and be excited of what I'm creating. It's definitely a class that I usually look forward to each week. If Morgan was to do the same class again, I would like it better if he gives a few presentation assignments. For example, in the semester, Morgan would schedule three presentation dates just to show what they have been up to or how they have progressed. They would then present it to class so that the class can give constructive criticisms on the project being presented. Furthermore, I think the class should have a few lectures in the semester in regards to APIs, architecture, or maybe just a demo of how certain frameworks, APIs, or software packages work with the most popular dev environment used for that semester. I think these suggestions would make students more attentive and get them more help for their projects.

Overall, I think any aspiring software developer should take at least one class like ISAT 340 and 348. Given the amount of creative freedom the classes give to a student like me, I thoroughly enjoyed working on my project day after day. As far as my grade is concerned, after going through the semester, I think I deserve an A for both in both class (ISAT 340 and 348). I dedicated about 13 hours a week on average each week on the project and I've a few all-nighters learning more about programming for the project. I believe I did the majority of the project as well. I was able to create a login and sign up system for the website, create a calendar, apply APIs to add more functionality into the calendar, and make the whole website presentable. Furthermore, I built the database structure that would support our website using MySQL and integrated it to our website as well. I took on the responsibility of developing most of the features of our website since Kyle and Justin have limited knowledge of web development. With all the work I have put into the project and all the great programming knowledge I learned this semester, I would like to have an A for the effort I given to the class. With all that said, I am very happy that I was able to take classes such as these before graduating. The classes gave me a creative outlet that I needed this semester.

### ISAT 348: Narrative

What were your expectations coming into this class?

Coming into ISAT 348 I didn't have many expectations other than that I would learn something about more about databases and front end development. Other than that I came in with a very open mind and was ready to learn whatever was being offered or taught. I did also expect this course to be held in a manner similarly to ISAT 252 and ISAT 340 where there would be a large focus on self-improvement and a community based portion where people would share their gifts in order to help an individual or a group.

What learning goals did you set for yourself?

The learning goals that I set for myself were to at least participate and grasp every concept, programming language, or methodology that was presented throughout the semester. I also wanted to be able to create some sort of project or software during the duration of the class. I wanted to improve a number of different skills including web programming, database structures, database languages (SQL and PHP), and other methodologies that are commonly used in the field currently (Laravel, etc.). The final goal that I set for myself was to be able to share some of my knowledge or skills with someone else in the community in order to help shorten their learning curve.

How did your goals evolve over the course of the semester?

No, my goals did not evolve much over the course of the semester. At the start of the semester, Dylan, Robert, and me wanted to create an application that would be capable of creating events and receiving responses without the problem of having to go through social media platforms that add clutter to an already busy world. We finished the semester with the same goals that we started out with.

In what ways did you feel you were successful?

I feel like I was successful because we developed a decent working application that solved some of the issues we set out to fix. We were able to complete more than half of the objectives that we had listed. I did also learn a lot more about MySQL, php, Laravel, and how applications work behind the scenes. I was also successful in teaching my other group members the things that I learned along the way and fix some of the issues that I had faced myself during the environment setup phase.

In what areas do you feel you failed to achieve your goals?

I feel as though I sort of failed to achieve my goals because I was not able to present the final working application that we had hoped for. The text-messaging portion was not yet implemented. I am not completely disappointed because I completed so many things that I had no idea how to do before starting the course. I believe that if we had just a couple more weeks then we could have the entire thing working from end-to-end and would be worth trying out in the real world.

Do you feel more educated? More enlightened? Less so?

I feel more educated after taking this class mainly in the sense that I know myself more and have a better feeling that I will be able to do my job well after graduation.. I would not say that I feel more enlightened purely because my definition of enlightened is to be approaching a state of almost complete knowledge in a field and I am nowhere close to that.

How have your activities this semester contributed or detracted from your knowing yourself better and having a better grasp on what you want to do in the near or distant future?

The activities and work that I did throughout the semester really contributed to knowing myself better and has allowed me to set goals for what work I want to complete in the near and distant future. Developing this project idea has really got me excited about what my future in software development might hold. I am usually able to learn things pretty quickly so I feel that with some more classes and some training that I could do some great things.

How did this style of course work for you?

I have mixed feelings on this style of course but overall I would say that I enjoyed it. I am used to the traditional lecture style classroom and have become accustomed to learning but I do enjoy the freedom that comes along with it. I would say that the best part about this style of course is being able to choose a project that interests you and not one that is assigned by the teacher. Without this freedom to work towards your own interests I don't think the course style would work. As soon as we were presented with the assignment to brainstorm for project ideas I thought of Rendezvous immediately. As the president of the Ski & Snowboard Racing team, a member of the Club Soccer team, and a part of many friend groups dealing with Facebook event invites has become quite annoying. Having the freedom to select any project allowed me to try and fix an issue that I wanted to and use any development stack and that made things enjoyable rather than seeming like a tough assignment.

If you were to take it again what you recommend that I do the same or differently?

If I were to take the course again I would recommend that you set some class days (maybe one a week – Wednesdays for example) in advance that any of the students in the class can choose what to focus on for the day. This would help students that were stuck with a part of their project to get back on track and this would likely teach others something that could be used on their own projects or would just be good to have as general knowledge (e.g. MVC, connecting to a database, etc.). I would also have meditation be made an everyday occurrence instead of just randomly done because it sets a good frame of mind going into each class session.

What grade would you like for me to report to the registrar for you, and why?

I would like to report an “A” to the registrar for this course. I feel as though I participated in class and held true to the values of the course in that I helped share my gifts and was willing to learn anything. I also think I did a pretty good job of juggling all of my credits and extracurricular activities this semester and want to continue on my quest towards becoming valedictorian for the college of Integrated Science and Technology. This semester has been my toughest one yet, not because of the course load but just because of life in general. Senior year is a time for wrapping up what you have worked towards for the first three years of college but I haven’t found it to be that easy. I have been questioning a lot of things, as the next chapter of my life is right around the corner. I now really want take the remaining time that I have left at JMU and do things that I have missed out on during my first three years because I was always so busy with school. I am still committed to finish everything that I need to do and get the highest possible grades that I can achieve but something has changed in me since getting a job.

David Abretski  
ISAT 348

I took ISAT 160, the critical thinking course taught by Dr. Pappas in my first semester freshman year. This was one of my favorite courses I have taken at James Madison University thus far. I remember one day in particular when we had a guest speaker which was you, Morgan Benton. The main idea that you were talking about and getting at was mostly about the philosophy of your ideas about grading, school and education. I have never heard of any professor letting the students choose their own grade and thought it was interesting because you are just focused on the education. This was good because people do not have to worry about deadlines for the most part on papers or assignments except for this one which I am procrastinating a little bit at. The fear of not doing well on a test or an assignment is no longer there and I loved the idea of that because school is not my strong suit. You were able to learn and do what you want with your time, whether that is productive or unproductive. It is all on you without a constant worry about a grade. I wondered what I would do in that situation if I were to choose my own grade. Would I make the most out of it? Would I slack off? Would I be humble in my own grading scale? Well, I go to do this choose my own grade and I enjoyed the class and had both good and not so good experiences with this choose your own grade type of setting.

Okay, enough of the sappy it was meant to be story about how I was able to utilize the choose my own grade scale two years later. I did not really know what to expect when taking this class. I got an override to get into this class because it sounded interesting, (The Multimedia Industry) and I knew who you were. Also, this class fulfilled one of the concentration courses for my major which is the competitive intelligence side of Intelligence Analysis. I got my override to get in this class and was ready to try and enhance my core technology skills. I did not have much knowledge in computer programming so I felt a little out of place in a class where I believe everyone was an ISAT major and had skills in programming apps and creating websites. It was difficult for me to come to any decision on what I was going to do in this class. I had never had a choose my own grade class before and have never done any sort of problem statement to create some sort of project. I started to draft ideas about apps or programs that could be useful to me. I did a problem statement for an app for an app that is for beginner gym goers. I did this because I feel like people who have no idea what to do at the gym or are just starting to get into it needed a simple app that has a very simple user interface and is easy to understand. I made my problem statement and did a social context analysis of this application. I drew user interfaces of the home screen of this app and had the different buttons on there and what they did. I am not the best drawer so they are pretty bland and simple which is what I was going for anyways. The only program I have used is visual basic and I only have a basic

knowledge in coding. This is all I did for this project because I did not see the time to learn a new language with the other work I had to do for other classes.

### Mobile Lifter

The gym can be a confusing place for beginners; where to start, what to do, and how to do it. Most gym apps can be just as confusing and difficult to understand for beginners. My application interface is laid out in a simple way to provide the most concise clear information for beginning weightlifters and gym goers. As you progress, so can your phone app just by a click of the button by going from beginner and where you feel comfortable, to being able to upgrade as you choose.

- User friendly

### Social Context Analysis:

There are many applications that provide you with diet and exercise tips and advice. They show you how to perform certain exercises but they are not all user friendly for beginners. A beginner may not know certain muscle group names or how to perform these exercises that are laid out before them. We are providing a simple way for first time users to explore a healthy lifestyle through weight lifting.

With a growing number of people exercising less and spending more time focused on technology there is an opportune moment to join these two trends to work together. Exercise is crucial to a sustainable and healthy lifestyle. Any tools that can help us better understand and comprehend information

The other project I started to work on was to gather data for a meditation device and to see patterns in brainwaves through different test and experiences. I enjoyed the meditation part of this class a lot. I have never done meditation before and found it very relaxing, resting, and enjoyable. I try to meditate regularly and I thought this was a great way to start each class. As an IA major I need the skills to gather data and analyze that data to see patterns or relationships then to make a decision based on what I found. This is what I was attempting to do. I did not get very far into gathering data though because I couldn't find a way to convert the data into excel and did not have the computational coding skills to do so. I should have put more effort in to this, but other school work and grades got me distracted from putting all of my effort into this class. I have the problem statement of this meditation statement below.

### Emotiv Epoc

Roughly twenty minutes a day of quiet meditation is said to enhance a person's emotional, mental, and physical health. With our "data headset software" we can be able to measure your

employees alpha, beta, theta, delta, and gamma brain waves to ensure healthy meditation thus correlation to a better work environment.

The data collected and neuroscience integration can

- Improve employee happiness, work ethic, environment
- Create comfortable area to explore ideas and better job performance

Observing various patterns you can see what the person is doing. Meditation has their own. We are trying to find our own open source neuroscience. So anyone can purchase these headsets and set them up in their labs.

#### Conclusion:

I believe I deserve an **A-** in this class because I attended regularly albeit I did miss a few classes. I thought that I would be a lot more productive in this class, but it was difficult because I had no idea what to expect out of this class or how to do any of these problem statements or coding because I have never done it before. This class helped me understand what it would be like in a business perspective on a team working on a project. I now have an idea of how this process goes, what it requires, and what looks like. I would have liked to be on a team with people on the class though because I'm sure I would have learned and experienced more out of it than individually. I did projects but did not finalize them as much as I could have.



## **ISAT 348: End of Semester Reflection**

Matthew Phelan

Submitted on December 10, 2014

Dr. Morgan Benton

Before registering for ISAT 348 my expectations for this course included learning how to build a website or mobile application and building it throughout the semester. Once I was enrolled and the semester and syllabus came around, my expectations changed slightly. After reading about the two grading options, I realized that the class would be a lot more open ended. Having had two classes with Dr. Radziwill, I had a little experience with classes with a more independent learning than the average class and was excited to build an app on my own. My goal from the beginning was to become more familiar with one or more programming languages as well as the process of developing and deploying a mobile application. I followed along with the rest of the class through the first half of the semester, writing a problem statement and social context analysis, and creating screens mockups and specifications for the app I planned to design (TailGator – an event planning app).

As the semester went on, however, I began to put more emphasis into my senior project and my thermodynamics class, and my priorities began to shift. I realized I probably wouldn't have the commitment to this class to actually finish the app I had planned to make, so I shifted my attention to learning the components of the curriculum laid out in the syllabus. I finished the HTML and CSS course through Code Academy and began going through the Python course, since my plan for the app was to use Kivy as the framework language and deploy as a cross-platform app. I learned the terminology related to the subjects in the course overview to gain an understanding of how I could go about building my project. Among the most important things I got out of the class are the things that will help me in the future for a number of my classes, such as how to use GitHub and the overall process of planning and building a web app.

Even though I did not actually develop the app beyond the planning stages, I feel like I got what I needed and wanted from this course through the things I took the time to learn. Because my priorities changed early on the semester, I am not discouraged about the fact that I did not complete the project. I consider IKM my secondary concentration (to Engineering & Manufacturing) because I am completing it more as a result of the space I had in my class schedule as opposed to a true passion for this type of material, and therefore I know that what I learned is sufficient for what I want to do coming out of school. In addition, the things I learned through this class have already proven useful towards completing my senior project and assisting in other classes.

What I learned in this course relates to a lot of other aspects of different classes and schoolwork, including some from the E&M concentration. For example, there is both a project management class and a product development class in E&M, in which I can see many parallels to the development aspect of 348. ISAT 435, the product development class, laid out a development process that could be applied to the development of an app in this course and provide further real world context, like if we were to actual be developing mobile apps for a company. Similarly, ISAT 433 teaches project management principles that relate to managing the 348 project, such as working in phases and by functional area. The planning portion of this course also helped me lay out a plan for my senior project, which involves creating traffic scenarios within a simulator and observing the effectiveness of different types of traffic signals.

I feel more educated due because of the points I mentioned above, but I feel more enlightened coming out of this course for a couple of different reasons. Firstly, I learned that I was not as capable of overcoming my procrastination problem as I thought I was. Waiting so long to get started on coding in this class was a big factor in me re-prioritizing my course load. I learned that I do not have as much initiative as I'd like to think I did when it comes to completing assignments without a whole lot of motivating factors. I know now that becoming a more proactive worker is something I want to work on going into my career, wherever I may end up after graduation.

Like the above paragraph might suggest, this style of course work is not ideal for me when it comes to accomplishing everything I possibly could. For example, if I had switched to the point accumulation system early enough in the semester I am confident that there would have been more motivation to get an app completed. Since I did not dedicate the time to that aspect of the course, it validates the fact that coding full time is not something I'm interested in for my future. I like having the ability to code and I recognize its endless uses, but it is not something that I'm extremely passionate about. I was able to finally reach this conclusion after I retrospectively looked at the prioritizing I did throughout the semester.

While I'm sure that this course setup works perfectly for a certain kind of student with the right interests, I would suggest a couple changes that I believe would benefit a student with less experience in the subject such as myself. Firstly, I would have preferred if there was material (or at least references) available under the topics on the course website. I recognize that

it isn't hard to look into the topics independently, but I would feel better about the material that I learned if I knew that it was what you intended for the students enrolled in the course to learn. Secondly, including some suggested schedule, no matter how rigid or flexible, would have given me a better idea of how you expect the learning of material and development of an app to be broken up throughout the semester. I understand and appreciate the concept of independent learning and choosing what you want to get out of the course, but I think these enhancements in guidance would have made a significant difference in my satisfaction with the course.

As for the grade that I would like reported to the registrar, I am requesting an A-. I know I got what I want and need from the class, but I would feel guilty asking for an A when I did not put in the coding hours that other students in the class surely did. I used aspects of this course's material in another class and my senior project this semester, and thus I know that I can put the things I learned into practice. For these reasons, I am choosing an A- to be my grade for this course.

Robert Bolen

ISAT 348

Dr. Morgan Benton

12/12/2014

When looking at my schedule at the beginning of the semester ISAT 348 was a class I was looking forward to taking. This was mainly due to the freedom of what I wanted to learn. I had very high expectations of what I would learn when coming into ISAT 348 for a variety of reasons. I believe this because I had already taken ISAT 252 with the same learning style and understood what was expected. This allowed me to take advantage of the pick your own grade learning style in that I know the positives and negatives due to my personal experience with it. I was excited to be able to learn what was interesting to me because when I took ISAT 252 I was sophomore new to the programming community. This experience that I gained from IKM courses allowed me to explore the idea of creating a mobile/web application called Alumni Connect. I first thought of this idea when attending the ISAT 20<sup>th</sup> anniversary events where I saw a growing ISAT alumni community eager to give back. The goal from this project is create more opportunities like the previous semester capstone project Tutor Scout. Already I had a goal for myself before the semester even started.

In order to ensure I made progress with this idea I had to narrow down what coding languages I wanted to use. In any project the goals you set change as time goes by. My day 1 goals were to be a more rounded web developer with good knowledge of PHP, JavaScript, HTML, CSS, and MySQL to design a web application. I felt this will give me experience in the three main phases, front, middle, and back end, when designing a web application. This goal was very general and I decided to do that way because I knew as the semester went along I would get in more in depth in my project and the goals would set themselves.

As the semester went on and my group began working on our semester project and my goals changed to help benefit the group. Instead of being involved in all three phases of web application development I decided to focus on the back-end and network connections aspect. The new goals that I had set for myself were to successfully create a database that incorporates the functionality of the web application without any unwanted data or errors. A website is always changing and more functionality is added which creates changes that I need to make to the DB. This is why I wanted the main table structure and relationships needed to be set so that when changes need to be made they are minor changes. My second goal was to successfully connect the database to the web application using PHP and allow a remote connection to the webserver by simply being connected to the JMU network.

I feel that I was very successful because I achieved the goals I set for myself. When trying to achieve these goals there are always issues that occur that involve troubleshooting to resolve. Surprisingly creating the MySQL database was not difficult to do, but there were issues in terms of updated package versions, outdated tutorials, and simply trial and error. Specifically phpMyAdmin had a new version from what I had previously used. In the newer version the simple detail of "table type", which I had overlooked, was the reason why I was

having issues. When designing the database I would export the SQL, but when I did this and imported the code into an older version of phpMyAdmin the table type would change. When this happened the relationships created would no longer exist and when trying to re-implement them MySQL would give out errors even though I used the same process. Once I figured out this was the issue everything began to work smoothly. My next goal of connecting the DB to our web application is where the tougher problems occurred. The php script was not able to establish the connection even though how the php was called and file paths were correct. I was able to troubleshoot this problem and there was an issue with how the form was written. Now that the DB could connect locally, I wanted to make the DB have remote connection ability. In order to do this settings needed to be changed in the webserver (apache2) configuration files. Once the DB allowed remote access to specific users an unexpected issue happened. The network that the desktop running the webserver was on a LAN network only available to those connected to the ISAT telecom network. In order to solve this issue I used an external wireless network interface card (NIC) and connected that to JMU official wireless. With this adapter I was able to give the server a JMU subnet IP address. This allows anyone who has connected to this wireless the ability to register to our web application and their information saved in our DB. This issue of working around the JMU network in terms of the security and networking that JMU implements was an issue I had not foreseen.

Even though the specific project goals I set for myself I was able to complete I still did not achieve my day 1 goal. I feel I gained a lot of knowledge, but I also feel I only just scraped the surface to web development and what it has to offer. This was another learning experience for me in that I should have asked for help when trying to get the ball rolling. I feel that the current state of my project shows the amount of work put in this semester, but it could have been so much better had I just consistently worked on it every day. Dr. Ming Ivory said something very wise in that "You will never be in another community like this again". I think what she meant by this is that there are so many professors or "experts" here that any interest you have there will be someone who has experience in that field. I feel like this works into JMU mission statement because even though major programs have strict guidelines there are electives that allow the flexibility. I feel that this course helped me get a better grasp of web development and what is expected in the field. I know I am not alone when saying I am very unsure of my future, but after taking my ISAT concentration courses, specifically ISAT 348, I have a better understanding of what is expected from potential employers in terms of what they are looking for from graduates. My favorite part of a class when they are used are semester projects. I say this because it gives you great experience, most jobs especially for new graduates are not primarily independent. There are independent aspects but that is the case for semester projects as well. I feel this project has

helped me develop the skills of planning, troubleshooting, and flexibility when trying to achieve a goal or solve a problem.

This learning style worked in some ways and didn't work in other ways. It allowed me to work on a project I had a personal connection to but I feel I did not utilize my resources as well I should of. I am not the first student creating a web application and I wont be the last. Some things can only be avoided unless you have previous experience in what you are developing. If I were to re-take this course I would have had a longer planning period to get a better understanding of the project goal, what languages are "best" to use, and the best way to go about splitting up the work that needed to be done. One thing that I feel impacted this was the uncertainty during the first week of class and I had not starter working sooner. Overall I got a lot of the course especially what is necessary specifically when testing or debugging code.

The grade that I would like you to report to the registrar is an A. Semester projects are always tough because in most cases you do not finish until the final weeks of the semester. I feel I could have made more progress on this project if different steps were taken, but I feel the progress that my group and I made this semester was great and kept the project on track to be finished next semester.



### ISAT 348 Narrative Essay

Before coming into ISAT 348, I was not exactly sure what to expect as far as how I would like the content of the course, but I did know from previous experience after taking ISAT 252 that I was going to enjoy the teaching style of the class. I had already experienced the style of this course so I was really looking forward to a stress free learning environment. I think that this is one of the most beneficial aspects of the class for me as I am not very good at taking tests, so I was anxious to be able to expand my developing knowledge in this type of class setting. I was hoping to be able to use the freedom of this course to be able to come up with a project idea, research about it and create it from scratch as we had done in ISAT 252. I really enjoy being able to do this rather than being forced to learn material that is not as interesting or material that will not be of value to me in the future. I knew that by working on the project I would learn many different bits of programming languages and skills that would have me wanting to learn more about developing a website. I also knew that there would be current, relevant material to learn based on previous experience in 252. I knew that there would be materials available to learn ahead of time online, which from experience in ISAT 252 helped to guide our semester project with tutorial or a helpful hint to think about while programming a website.

Some learning goals that I had were to figure out how to put together a working website and experience what a developer may go through in the process. I knew that creating the website would be a challenge for me because as it had been a very long time since I had been working with code in HTML, CSS, PHP and JavaScript. In the past I have found that setting a goal for learning a new programming language was difficult for me, as I have always been presented with learning multiple languages at once. I hoped that I would learn more of what a developer would experience while creating a website while working with a group member.

My goals definitely fluctuated over the course of the semester. Our first goal was to create a website that would allow students to communicate effectively to Alumni for advice, recommended campus events to attend, or job postings that Alumni would like students to see. At first, my partner and I would set project deadline goals to complete over the course of the semester. These project goals first consisted of parts of the website that we already knew how to code or particular items that needed to be finished before another person could even start before they could complete their goal for the week. Then, the goals turned into researching how a particular language worked, how a process was supposed to work or tips on what to do while coding a website. As our project started to come together and started to function the way we wanted we ran into more complicated more complicated roadblocks. This led to longer or less items on the goal list for the week.

I feel successful in knowing that I was able to think of an idea with another person and create a functional website by the end of the semester. Although we were not able to fully complete the website, I learned what to expect while developing a site. It was nice that my group member was interested in more of the backend work of the website, as I was more interested and was better at working on the frontend work. This helped the progress of our website greatly. It was nice to be able to change the website to how I wanted and also felt good to update and improve the website every week. I feel successful in the way of now knowing that website development may not be my strong suit but I was able to gain an appreciation for what it takes to create a functional website. I also feel successful by being able to create and show a project that I really enjoyed working on.

I definitely feel more educated after this semester. This semester has allowed me to work on a project that I found interesting, which has helped me learn the material that I preferred to learn. I think that this is very important because it makes it easier to learn things that you actually want to learn more about. This meshed perfectly with the material that was available to learn on the course website. The labs contained relevant material and helped the process of working on the website. Learning about Github helped my group member and I realize the importance of version control. One of the worst feelings is losing work that you have worked hard on, so it is nice to be able to save previously worked versions of code sets.

My activities this semester have helped to contribute to knowing myself better as far as being a website developer. I learned that there is so much to learn in the web world and it a lot for me to grasp all at once. After learning how a mobile applications over the course of the semester as well, I found that I really enjoy working on mobile applications. This has sparked an interest in the front-end side of mobile applications for me as I really like to change how the application looks and placing all of the assets on the screen so that they can be used within the application.

The style of course work was aimed perfectly for my style of learning, but at the same time I feel as though it was almost too laid back for me. I definitely liked having all of the lab materials ahead of time so that when I ran into an issue on my project, I could check the labs to see if there was a helpful solution or a particular keyword or hint that would help me solve my problem. I have really felt the itch to work on something that I am passionate about lately, because I enjoy working on all types of development projects and would be very excited if I was able to come up with a new idea that no one has thought about yet. This semester has allowed me to work on a project that I found interesting, which has definitely helped me learn the material that I preferred to learn. I think that this is very important because it makes it easier to learn things that you actually want to learn more about. I really like that I was given the freedom to explore any type of project that I could think of. This style of class was also really beneficial for me because I am not a very good test taker and by working on a project instead, you have much more to show for what you learned rather than a grade. I find that when I study for tests, I wait until the last minute and then cram all of the information in my head to attempt to pass the test. Within a few days or so of that test I have already forgotten most of the material

in order to study the same way for another test. Since test taking was eliminated in this course, I really felt as though that my learning would greatly increase.

If I were to take this class again I would definitely recommend to keep the choice between choose your grade and the points system. I really like the no pressure attitude towards this class, which goes along really well with the system of choose your own grade. One small recommendation that I think would be beneficial for students to be able to click on links for tutorials that have to do with the labs on the course website. Even small snippets of code would be helpful for students. New and upcoming topics in the development world are always fun to learn about, which should continue to be a part of this class.

I would really appreciate it if you were to report an A to the registrar because I have demonstrated some skills of mastery by constructing a functioning website while using some of the tools provided in class. Although my group member and I weren't necessarily able to finish everything we wanted to have on our website, we were able to research topics that we wanted to learn about and that itself was a very valuable experience. I am proud to show the work I have accomplished in this class and I think that it shows how interested I am in learning how to create my own website from scratch. This process has helped me appreciate currently existing websites that I use today and think more about what goes on behind the scenes of the site. This course has not only helped me to appreciate websites but also has helped spark an interest for me to try to come up with a new exciting idea.

I feel as though that I failed to use my resources to their full capacity. I realize that I should have asked for more help with my project and I think I would have greatly benefitted from doing so. There were some weeks where I was not able to accomplish my goals, due to running into difficult problems I failed to realize that when I was stuck on a particular part of my project, rather than getting frustrated and not working on the project, I should have asked for help. I also should have asked for help from my classmates, as some of them could have been working on similar projects or tackling similar problems.

I would like to think that I have learned from my failures in this class. During the course of the semester I was faced with several failures and challenges, but was able to come up with a solution in some way or got help from my group member. I realize that I need to take advantage of the resources that are readily available to me. I should ask all the questions I have to someone who knows that they are doing rather than researching everything online and trying to find a solution that way. I plan to ask for more help when I need it and to not be afraid to ask a "stupid" question.

Brandon Schimmel

ISAT 348

12 December, 2014

### Course Essay and Final Thoughts

At the start of the semester, what I knew about this class was that I would learn about the Multimedia Industry. Until I read the syllabus, I had no expectations of the class. When I learned that I had a choice how I received my grade, I did at least ask myself how much work I was willing to put into this course. I knew that I would be more motivated to do work if I was not under the pressure of a structured grading system, knowing myself however, I would slack off if I was not held accountable for my work. On the positive side, I knew that a friend of mine would be in the course and if we worked together then we would definitely make a great project.

My initial goals for this class were to learn about real-world software development by experiencing it myself and to teach myself how to better research tools and design techniques for my project. I want to become a videogame developer and designer sometime later in my career so I suggested to my partner that we had a whole semester to work on a project so we could think of a big goal to accomplish during the semester and that was to develop some kind of mobile game. The smaller goals we set for ourselves were to brainstorm uses for our project, the users and the internal design of the project. I had to change my plans when my partner decided to work on his own project.

I settled on at least creating the screens and design of the project before attempting to write any code for the project. I was also able to download android development tools for my Eclipse environment and although I did not write any code, I knew what functionality I wanted in the game and how sub-features could be organized and interact with one another. I also did not have much time to work on the project as I dedicated the majority of my time to two other Computer Science projects, one of which was centered on user design and the other on implementation of GUIs and multimedia software. I planned to use the skills I learned in those classes along with the skills from this class, use cases, test plans and screen layouts to make a large project on my own.

My success were the limited artifacts I developed by myself and the documents I kept with my partner at the beginning of the semester. I wrote notes about various things, character archetypes, world map progression, combat flow, dungeon generation and how the game would tie into exercise and travel. As a game, a real world application is not fundamental, however, we did decide that because of sedentary lifestyles, a game where progress encouraged physical activity and movement was a novel idea and an ambitious project. Professor Morgan did suggest that for the game's pedometer we could use an open-source pedometer on GitHub. Knowing that there are online resources available to assist my project was a plus as I would have less code to create from scratch. The initial game notes were in a scrib document and included our reason for creating a travel-based RPG as well as our discussion of how the game would behave and how to represent RPG necessities like experience, stats, and our travel feature. My personal success came from my other classes as I intend to create the project I brainstormed in this class by pitching the idea, which has functionality considered to a degree, to other programmers who would be interested in collaboration. Knowing Java GUI development is a great benefit as I can

development applications for systems that are Java compatible. The experience of tailoring my design towards users based on their needs, wants and tendencies is another way I can sharpen my game's design when I start to develop it.

My biggest failures on this project were my inactivity and losing the trust of my partner. At the beginning of the semester, we were given a suggested timetable to complete our project plan and test screens. My partner and I met several times to work on the project design but had different ideas of teamwork, responsibility, communication as well as incompatible personalities and skillsets for a long term and free-form project. He decided that his time would best be spent working on his original project idea, and I agreed, I was not going to waste his time any more than I already had. I attended almost every class I could up to a point in the semester when there were no more lectures. I had other tasks to complete and I could focus better in an environment outside of class. I spent virtually no time outside of class in the second half of the semester other than during break on the project. I became busy with the bulk of my Interactive Design and Multimedia design project work and my job search and neglected coding anything for this project.

I did learn that I need to communicate more effectively and be forgiving of my partners. I know I'm not an expert or a genius in many regards so I rely on other people to have brilliant ideas that I can assist them with. I usually generate initial concept because I research is a weak skill of mine as is interpersonal understanding. I cannot know what another person is truly thinking until they act or say how they feel and so it is important that I both expand my knowledge base on my interests and practice my interpersonal communication skills. As I write this essay I am in the process of conceptually and mechanically designing a game with a fellow Computer Science major and we are meeting my established requirements for good rapport and connecting our skills and interests. My other lesson learned is that I should be patient, as I am a slow learner, and to keep learning new things until I have a wealth of knowledge to synthesize into a project.

I feel more enlightened from this experience as I know things now that I hadn't previously. Any experience you can walk away from is a learning experience. Whether you choose to learn anything from it is your prerogative. I have already stated what I learned so I may as well say what I learned to a lesser degree. I know how to begin designing multimedia applications and that there are physical artifacts (project plan and test plans) and electronic resources (GitHub) that developers have at their disposal to better design their project.

Working on multimedia system design and development for the majority of the semester helped reaffirm my interest in videogame development and brought to light my skills and weaknesses as a programmer and a person. I am stubborn when I have an idea about how a task should be done and how a course outline should be interpreted because going into anything we have preceding knowledge. It's not weird to believe one is right about something if the rationale matches their calculated conclusion as we are all different in mental processes and experiences. How we should perceive the course, what knowledge is necessary and what needs to get done are the questions that bothered me this semester. Interpersonal life revolves around intangibles inherent in people. Knowing that I've done something to make partners of mine want to leave is inexcusable of myself even if it their choice to leave. We all have mechanisms to how our brains work, if you believe I'm stating the obvious, please don't think I'm wasting my time or resources right now. I know that if I want something, I cannot always rely on other people because unless

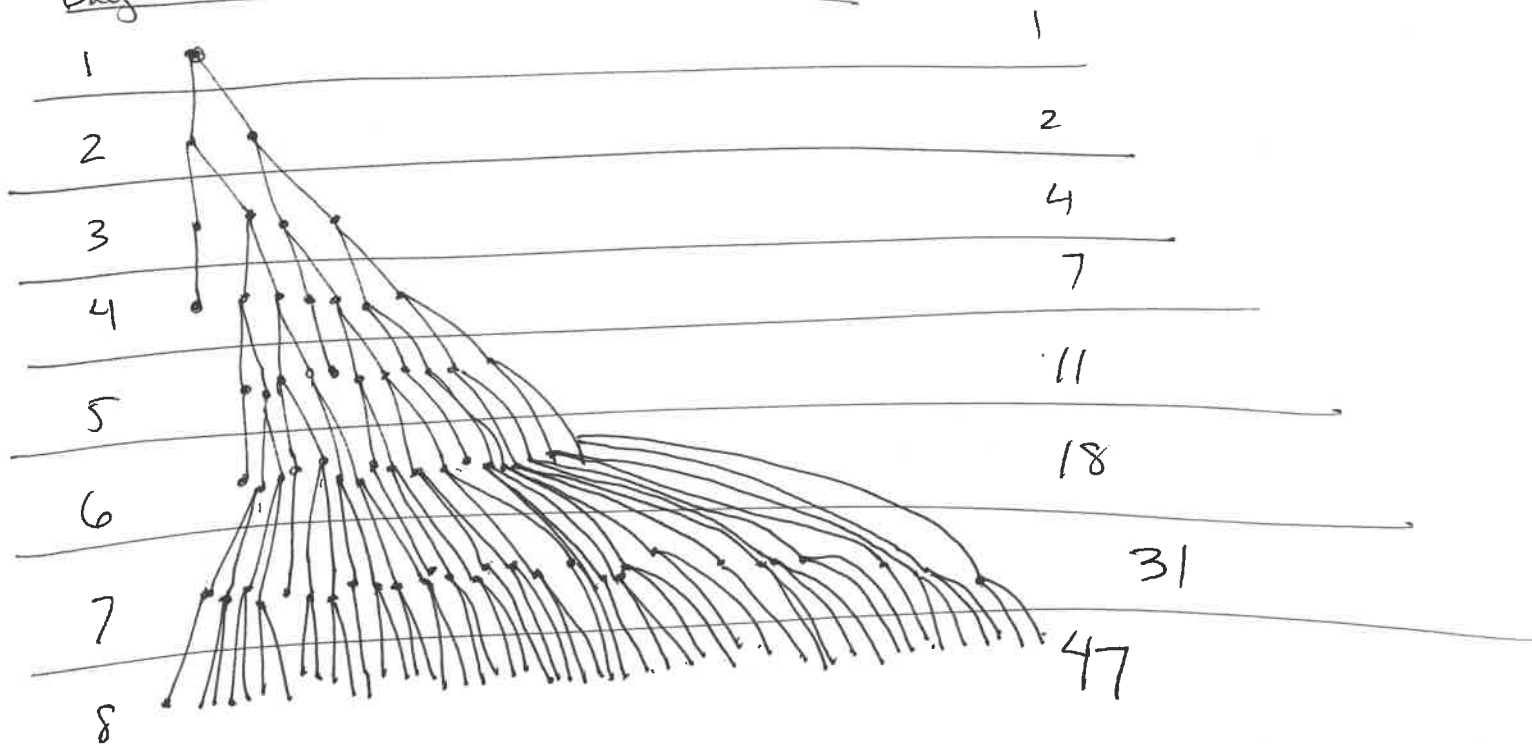
our goals match up, our interests maintain aligned and our perceptions of the world cooperate, the friction will be something unbearable at one point or another and I don't have time to waste on disagreement. I need to keep learning and I'm no use to anybody if other people don't want to work together. I cannot always be the person to realize this and need to work with other empathetic, logical, community-driven individuals. That was what I learned about myself from experiencing group friction. Positively, I learned that there is hope for me in sticking to my interests and proactively working on software design and development. To that end, I plan to stick to my knowledge and skillset and learn more as I go through life.

The style of this course was very useful, as it helped having a course where it was generally hands off. I learned what I wanted from lecture and used the remaining time in the semester to focus on other group projects, interpersonal relationships and building my programming knowledge base. It was to my benefit to treat the course I did where although I have to final project to offer, I can easily begin programming either in Java with my CS class knowledge or the Android programming environment where I can begin teaching myself the development language and test my project simultaneously. If I needed to do something after my TA hours in the morning on a class day, not having pressure to attend class was a benefit. The teaching of the class seems to fit the Professor's teaching style and beliefs and students can learn what they want and use their time as they need. As I said previously, I know that I work better with structure, but I don't need extra emotional weight in a class when the knowledge gained is on a self-learn basis more than in class. I still learned about the steps in application development and once I saw that there was nothing else taught other than what I asked to know or learn I appreciated the class structure.

If I were to retake this course I would suggest it be taught similarly with the addition of a beginning of the year survey to request what everybody knows and perhaps roundtable discussions or online chats about topics the whole class could benefit from about professional or recreational application development. The class ran smoothly and the professor taught what he wanted to. I did also enjoy the meditation at the beginning of classes as it helped to relax me and prepare me for the day to come. I would recommend offering the same option of name your own grade versus structured grading as people will enjoy being given choice and one that is based on their comfort with structure and motivations.

Everything said and having thought about it myself I request that my grade be recorded as a 'B+'. I originally was going to ask for a B because I have problems with guilt and felt like I did nothing this semester. I could ask for an A because I would receive the highest possible grade or a D if I were true to my superego perception of academic achievement. I did work in the class and while most of it is notes and thoughts, I have made more progress than I had coming into the class. I have multiple design ideas that I will continue to work with people on and have better understanding of interpersonal communication in development. A grade of 'B+' means better than above average. My experience this semester is just as that grade I give, I did better than I expected in the beginning of the semester and I'm not treating my splitting with my group partner a negative nor do I think that having not implemented my design means I deserve a lower grade. This is the grade I give myself knowing what I am capable of, what my limitations are and my potential with what I learned from this class and my other class this semester.

Day



	$d_1$	$d_2$	$d_3$	$d_4$	$d_5$	
1	1					
2	1	1				
3	2	1	1			
4	3	2	1	1		
5	5	3	2	1		
6	8	5	3	2		29
7	13	8	5	3		47
8	21	13	8	5		

## ISAT 348

When I came into this class, I had many expectations for it. I expected I would learn how to use at least three programming languages for computer-human interaction (most notably Javascript and PHP, as those were the only two I really could be sure would be taught in a class like this). I also expected a fun environment where I would be able to learn the previously mentioned things, given accounts of the professor being "super-chill. Like insanely chill. So please just chill out about that class."

I set for myself the goal of learning and becoming proficient in(as in, be able to make advanced use of) whatever languages would be taught in the class. Upon learning that the languages would not actually be taught in class and that the learning was more put in my hands, my goals changed drastically. Knowing that my other classes required large amounts of my time and that my self-teaching skills were extremely poor with any language I don't have an inherent affinity for(apparently not PHP or JavaScript, which would have been the most useful for most of the sorts of things I would have liked to do). Thus, my goal changed to be proficient in one language or become able to use multiple languages in a more elementary capacity.

On the whole, I was both successful and not successful at achieving my goals. Over the course of the semester, I did become proficient in MySQL, improved my knowledge of HTML and CSS, and although unable to do more than some basic usage of PHP, did learn enough PHP to help cobble together a search engine for a MySQL database. I also vastly improved my knowledge of Java GUIs, as shown by my semester project(after many topic revisions overall), a D&D Next Character Generator. Evidence of my other successes in this can be shown by my various pieces of homework for ISAT 340, contained on my computer, including various databases, queries, and websites (although no evidence for the PHP as all the code is contained on one group member's computer for that project). However, this can overall be considered a failure for this class because the sole reason I was able to do so was because all of the success above was due to all of that material being part of another class, ISAT 340(Software Development). Otherwise, I didn't achieve my basic goals in this class, unless you consider the open-endedness of the class allowing for extra time to absorb what was taught in Software Development class.

Overall, I think I failed to achieve my overall aim to achieve my goals in that my sole improvement from just this class was an improved understanding of Java GUIs. While better than nothing, it is far worse than my original or even revised goals were, as it was just improving my knowledge of a specific area of a single language I already knew. While this is not the case for my overall learning in the semester, in this case, I am solely counting the learning done in the course of this class's work. What I learned from these failures is that once more, I have proven once more that if I do not understand a programming language from the



start that I definitely would do better to have actual instruction concerning that language. I've also learned more about myself, in that I seem to prefer learning a language than relying on software that can auto-generate code for me to use. While I normally have no compunction about using such tools if I have learned the language, it would seem that I severely dislike this to the point where I could not bring myself to use code-generating software where it would have been more convenient to do so and/or allow me to use a programming language I did not understand, as I would not know how everything worked. This particular trait is not good, especially in a work environment. In the future, I will work to be more okay with using code-generating software when I do not fully understand a programming language. Also, I will continue to work on my ability to self-teach any programming languages I do not find myself understanding on an intuitive level.

While I feel I have become more enlightened due to this course, as I have I have learned things about myself or at least gotten the courage to work on them in the future, I am not really the more educated for it. I didn't really learn that much on my own, however hard I tried, and I feel I would have been better just solely focusing on learning a single language instead of worrying about how to turn it into a big semester project, which I felt added pressure to my learning any of the languages I tried and might have inhibited my ability to learn any of the languages, although this particular observation is simply a theory based on similar past experiences, as I cannot be entirely sure that this is the case for this particular class.

Concerning the activities in this class, I feel that the overall activities for the course neither contributed nor detracted from my coming to know myself and what I would like to do in the future. They simply did nothing. Some would say that this detracts from knowing myself, but it did not put me in any doubt of what I already know about myself, so I would judge that to not be the case.

Overall, I would say that the style of this course did not really work for me, While I am fully capable of learning more advanced topics within a course or programming language on my own, I have a very hard time learning the basics on my own and struggle to learn more advanced topics on my own in that case, with the exception being one of the few languages I have been able to learn quickly. If I were to take this course again, there are a few changes I feel would greatly improve the course. Firstly, an in-class primer to the languages that could be covered by the course would be very helpful, spending a week or more in class (although no more than two weeks) on each language to help students (especially ones such as myself) get a grasp of how the basics of each language works, so that they are better set up to do more advanced things with their semester project. On the topic of the semester project, while sounding good as a concept and is doable for many, I feel it would be helpful to have the option to have multiple projects be an option during the semester, these being due perhaps monthly. While these would most likely not as advanced as the big


Jake Smith

semester project and also not grant as deep as an understanding of one or two languages used in a big semester project, I feel this would allow people to understand and have a greater exposure to a greater variety of languages, most likely being able to understand the languages used to an intermediate level at least. Being exposed to a greater variety of languages would also help people be more versatile and have a better grasp of which languages they prefer and would like to work with in the future. Lastly, I would recommend that meditation be shortened or removed from the class for earlier sections of the class, as it can lead to immense amounts of sleepiness from already tired students, which can then cloud their thinking.

As for the grade I would like for you to report for the registrar, I would like you to report my grade as an A. This is for two reasons: 1) while I did not achieve or learn as much as I would like from the course, I still put in hours upon hours weekly trying to do so, and that's an A for effort at least, 2) I do need an A, as that would be best for my GPA.

Jaymie Krambeck  
ISAT 348 (10:10 - 11:00)

I honestly wasn't expecting much though I knew multimedia industry was a subject I was interested in and could learn more about. I thought it would be your usual "We will be learning about INSERT SUBJECT (Multimedia industry), and to increase your understanding you will need to complete projects 1, 2, and 3 (number varies) throughout the semester." These projects usual do help understanding of very specific topics but are then never used again and serve no other purpose which has really bothered me in my college career. I was very surprised when I walked in and I was told to pick my own project. I had no idea what to do since I was never given this opportunity before so at first I still tried to do a regular project that I thought you as the professor wanted to see. Then when Blake said he wanted to create a game and it was considered an appropriate project I knew that's what I was going to do. That's when my expectations really took off, when I finally realized I had freedom to learn something I thought was interesting and I could take this project as far as I could without having to worry about being punished (grades...) for taking risks and trying new things.



My first goal was to work on my researching skills; this was accomplished through first picking an appropriate game engine for our needs and then of course figuring out how to do pretty much everything in the game. Another goal was to learn how to better be able to really look at someone else's code and understand how it interacts with the game engine. It's easy just to use other people scripts without really looking at them but I wanted to make sure I knew how everything was interacting with each other. It isn't the same as looking at your usual code because you have to understand how the code is interacting with game engine and translate C# code to JAVA Script (this was just the most common example there were other languages I had to look at). I also made it a goal to learn more about the game industry. I wanted to check out what jobs existed, what coding languages or game engines are most commonly used and why, and I checked out work by indie game makers.

As the project went on research became more in depth and even if I found one solution I would need to find at least 2 more to confirm that it really worked then figure which solution was easiest to work with and understand. Then even though I could understand what was happening I needed to be able to modify the code without breaking anything or combine two separate scripts of code so that I could get the game to do what I wanted when I wanted. None of the code in this project was just taken all of it was either original or altered to fit our needs (or experimentation). There was also so much involved in trying to work in a team, what people's tasks were and the goals for the team were constantly changing. We

needed to learn how to use unity and blender, then we needed to figure out where everyone was with understanding the tools available, then we split up tasks and those who still needed more time to figure out how to use unity or blender did more research, and so on. I've also decided to make goals for next semester involving finishing up this game and perhaps trying to make a few smaller games.

I accomplished so much more with this game then I originally thought I would. I had set high goals with the game just so I would keep working and getting as much done as possible. I didn't really think we would have a game at this level; we have a way to make working quests, zombies chasing you (a bit off but technically working), a flashlight that only starts working at a certain point in the game and works well, and so much more knowledge about the gaming industry. I have enough information where I could create a small YouTube channel to give tutorials to help people make simple scripts in Unity. I've solved a few common issues I found with accepted scripts and created completely original scripts for making a quest system. The game we produced and demonstrated in class is at a great place for only a few weeks of work especially since a lot of that time was devoted to trying to figure out how Unity and Blender work and how they interact with each other. One of my friends who apparently became an associate producer actually believes I have a good shot at winning an IGDA scholarship which would get me into one of the greatest game industry events for free and a chance to network with incredible people in the game industry (she actually won this same scholarship a year or two ago). I believe I was very successful this semester and it got me thinking about what I really want for my future. This took a lot of my time but for once I was finally enjoying a project I was working on and learned so much from it.

I hoped our team would meet more and be able to collaborate better. I made ISAT, quests, and other bits of code. Alex worked with animation and the zombie script. Logan made various objects in blender for ISAT. Logan and Blake both did some research on the ISAT 101 course and ISAT sectors and Blake also put the objects in to our game in unity. We met a few times to discuss our tasks, talk about what needed to be done next, and to form a general story/quests. I wish we had met a bit more to really understand what each person was doing. I'll checkout the animation script and blender model later but I wish I got to see more of the work while it was in progress. In the future I'll promote a little bit more team collaboration and I do understand we all had other obligations that took our time this semester. I feel like we could have gotten more done if we had met up more and I could have done more to promote that.

I feel I am more educated and enlightened just because of all the work that went into this project and the fact I could do as much as I wanted without fearing that my grade would suffer for it. I love being able to take risks and trying new things but a

lot of projects in my courses don't allow me to do this. As part of the project I looked at what the gaming industry was like and jobs I would potential like to have. It will take a while to get there but it's where I want to go right now. The short term goal is to make it to the GDC through the IGDA scholarship. This will give me a chance to talk to people who work in the industry at various companies. This project really got me thinking and finally excited about the future.

This was by far the best class I felt I've ever taken. Even at a young age I liked to set big impossible goals just to see how much I could actually get done and I loved trying new things even if it didn't work out. I believed that college had kind of killed this trait that I had loved so much but this class revived it. The amount we got done didn't become a "full" game which was the goal (something I knew wasn't going to happen) but we got so much more done then I actually thought we would and apparently a lot more then most people beginning game development normally make in a few weeks. One thing I would change though is trying to get the team together more and trying to better understand each others work.

I would like an "A" reported to the registrar...I INVADED ISAT WITH ZOMBIES! You know for educational purposes...I honestly committed so much more time to this than I thought I would and loved every second. Each little thing I had to do in the game taught me so much. Trying to get automatic opening doors taught me how to read other peoples code, modify it, and eventually come up with my own code and object interactions that solved an issue normally found with this door opening script. Getting the lights to turn off at a certain point in time taught me finding simple solutions to complicated problems, originally I was finding huge scripts of complicated code for getting an object to wait some amount of time to trigger but then I really thought about what needed to happen and managed to get the lights to wait 3 seconds after talking to an NPC in one line of code and simply combined this wait solution to the lights off script. These were just some of the simple tasks and I learned so much from these and even more from more complicated interactions. I accomplished so much with my team and I think we really do deserve an "A."