iMSA Website Update A

Project Report

Fall, 2017

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Project Report Foreword

We, Team 6, have made our Project Report as up-to-date and user friendly as possible.

When viewed electrical, specific sections can easily be viewed with bookmarks. In the Table of contents click on <u>Section titles which are formatted in blue, underlined text.</u> These links will send you to the start of a section.

You can return to the Table of Contents by clicking the <u>Click to return to Table of Contents</u> link located in the footer of every page.

Major Sections are all denoted by a title page with the iMSA symbol. On these pages are the listed due dates of each section. When we reposted old work into this project report, we have left it largely unchanged. This is why the due dates of those assignments are on display: to give the reader perspective on dated information.

While the sections are largely unaltered from their original states, we have included new text highlighted in light blue coloration that briefly provides the latest information and tells our readers which sections possess that information in greater detail.

"We are very proud of our work this semester. It is my hope that future iMSA officers can use our example to continue to deliver high quality work on behalf of the organization."

~ Weston Rick Davis - Project Manager of iMSA Website Update A

Team Charter

(Finished on 9/8/2017)

Team Name

Team 6

Project overview

iSMA website and app. iMSA is in a process of building up their website based on the current hosting and domain. This project may take about 3-6 months to complete, including different stages such as planning, research and ideas, wireframes, mockups, implementation, completion and testing.

iMSA is a non profit SFSU club that is dedicated to giving career resources to IS and IT students. The club has become active again in the last 3-4 years, and has been slowly and steadily growing. The outside market for IS students is helping to galvanize this growth. iMSA leadership wants the club to become bigger in size, host more events, and create more career opportunities. In the coming years, iMSA leadership hopes to turn the club into one that will bring prestige to its members. A superior website is necessary for the club iMSA leadership wants to create. It may help draw new members that are necessary to the club's growth.

Our team hopes to draw more awareness & members to iMSA by making proposed improvements.   Getting more users would create a need for further website updates where iMSA could advertise to members and get further profits. In other words, the growth that these improvements will bring will beget further growth and progress towards iMSA's goal of prestige.

Team Members

Weston Davis	(925)-255-3783	wespdavis@gmail.com
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Lucero Davalos	(510)-640-2053	lucerodavi96@gmail.com
Olga Smirnova	Whatsapp (420)-775-881-286	smirnova.olga09@gmail.com
Alexander Tam	(510)-688-8778	alexander.tam93@gmail.com

Roles

- Project Manager / Domain Expert:

- *Weston Davis:*

"This is a project management class and our team's 5 members are all ambitious individuals. While I accept the title of project manager, I must say that the five of us: Thinh, Lucero, Alex, Olga, and Weston are dedicated to learning to lead. Since the team's founding, each of us have accepted responsibility, held that responsibility, and followed the decisions of the team. We trust each other as leaders. For each of us, all acts of stepping up to take responsibility and lead a goal to its finish should be encouraged."

- Project Sponsor / Subject Matter Expert (SME):

- *Thinh Tang* (President of iMSA)
- *Lucero Davalos* (Marketing Director of iMSA)

- Technical Expert(s) (TE):

- Alex Tam (Budget Expert of Team 6)
- Olga Smirnova (Technology Expert of Team 6)

"Every member of this team is an IS major. I, Weston Davis, can say with assurance that Thinh, Lucero, Alex, Olga and myself all have a variety of experience with different aspects of computing technology. It is through this experience that we may each step up as technical experts. In ways we will not anticipate as of today."

Project Ownership: iMSA leadership

- Thinh Tang   President,   "president@imsasf.org"
- Thomas Capello   Treasurer   "treasurer@imsasf.org"
- Lucero Davalos   Director of Marketing   "marketing@imsasf.org"
- Weston Davis   Project Manager of Website Update "webmanager@imsasf.org"
- Preyansh Kotecha   Director of Public Relations   "pr@imsasf.org"
- Roy Anguiano   Director of IT   "it@imsasf.org"
- Sabeena Maharjan   Director Professional Development "prodev@imsasf.org"

Why We Chose This Project?

"Working on the iMSA case was always a consideration for us. At first we had many wonderful ideas for projects and the iMSA website was one of them. Over the first 3 weeks of class we came to eliminate project ideas as it became clear that we lacked the information needed to run a successful project. Our team includes the president of iMSA, Thinh Tang, the director of Marketing, Lucero Davalos. I am the project manager of Team 6, Weston Davis, and I too am a member of iMSA. Alex Tam and Olga Smirnova have included their support. Our team had considerable ties and influence over this project. When speaking of ambition, running and helping a college club grow into a prestigious club brings honor to Team 6 and honors SFSU."

Attributes of Project

● **Purpose:**

iMSA is a non profit SFSU club that is dedicated to giving career resources to IS and IT students. The club has become active again in the last 3-4 years, and has been slowly and steadily growing. The outside market for IS students is helping to galvanize this growth. iMSA leadership wants the club to become bigger in size, host more events, and create more career opportunities. In the coming years, iMSA leadership hopes to turn the club into one that will bring prestige to its members. A superior website is necessary for the club iMSA leadership wants to create. It may help draw new members that are necessary to the club's growth.

By making these improvements listed above, our team hopes to draw more awareness and members, to iMSA. Getting more users would create a need for further website updates where iMSA could advertise to members and get further profits. In other words, the growth that these improvements will bring will beget further growth and progress towards iMSA's goal of prestige.

● **Time Frame:**

Our project is to be presented on 12/8/17. That is 71 days from today (9/28/17). "At that point, it is our hope that we have made a contribution of significance to iMSA and that we are prepared to present that contribution with a cleanly made powerpoint presentation."

(Update: 12/12/17): Project concludes on 3/1/2018. See "WBS" & "Schedule and Budget" sections for details.

● **Resources (Budget):**

Pending, contact *Thomas Capello*.

(Update: 12/12/17): Budget has been determined. See "Business Case" & "Schedule and Budget" sections for details.

- **Quality:**

Expected quality will be dictated in our file: BUS CASE ISYS 663 OUTLINE.

Environmental Aspects of Project

- **Risks and Assumptions:**
- iMSA has limited time that should be best spent towards building iMSA's presence on SFSU campus. Failing would mean time was not spent in the clubs interest.
- iMSA has only membership fees to risk on business action. These funds will be used to finance this project and are an investment
- **Interdependent Tasks:**
- This will be filled in as the team acquaints itself with iMSA
- **Organizational Change:**
- iMSA's leadership was largely formed at the beginning of this semester.
- As of now, the three members of Team 6 who are not officers in iSMA will begin to further integrate with iMSA's operations.
- **Operating in an Environment Larger Than the Project Itself:**
- ⅗ of Team 6's members have much to learn about how iMSA fits into campus club power. Perhaps our two members with iMSA have much to learn about campus club power as well.

Agreed Upon Meeting Times

Weekly meeting: Fridays 1:00 pm to 3:00 pm | Thursdays after 3:30pm
(These meetings are organised with the knowledge that certain team members will not be able to attend at certain times. The meetings are organised as such to acknowledge and incorporate this fact and insure that all members are involved each week.)
Use Google Drive to collaborate
Skype/ facetime to communicate
Use group chat on Whatsapp

A List of Team Rules and Expectations

"Each member of this team should leave space in their schedule to do the work of a slacking teammate, as we have no way of assessing our fellow team member's reliability at the start of the project.

Think of this as being on-call.

If a teammate suddenly informs the team that they cannot handle their chosen work; the rest of the team must take on that responsibility *two days before a due date.* Naturally, the teammate who did slack should expect this to be reflected on their peer review. Worse yet, if this team member does not inform the team then discussion should begin regarding dropping this teammate.**"**

"Regarding meeting attendance and work. We are flexible so that we can address shifts in our lives, and yet we have clear expectations that are sternly enforced. A lack of attendance alone is not enough to result in bad reviews or expulsion. For example: a teammate has missed 3 meetings but has informed the team in advance, been on the phone during meetings, and has made up for their absence with extra work. This is an active team member and will not receive bad reviews.

Team members will receive bad reviews when *their absence is felt by the team.* When there is little to no communication and no effort to make up for an absence:

1 missed meeting will result in a stern warning.
2 missed meetings will result in a bad review from the whole team.
3 missed meetings will result in expulsion.**"**

"Disrespectful and offensive behavior will be noted for peer review and can result in expulsion from this team.

If this behavior is acknowledged and addressed by the abusive teammate, that should be considered and acknowledged as a lesson well learned by the rest of the team.**"**

"This project is a learning opportunity and quite possible a business one as well. We should expect ourselves and our teammates to make efforts to us this project as a step towards our own individual aspirations.**"**

"Good communication is a virtue. If we must miss a meeting, pass on work, and so on, inform the team immediately. This habit will always make the review better!

Even if a teammate has committed offenses that merit bad mentions on peer review.

We as a team all have off days and won't be punished for them if we do as much as possible to make it easier on the rest of us.

In the case that work must be passed on to the rest of the team, promise and deliver on an offer to do more work at a later date. Do so and there will be no consequences whatsoever.**"**

"Saying more about good communication, it is encouraged that we openly and honestly speak to each other regarding how we interact.

We are all different people with different cultural backgrounds and like to interact in a certain way. For example, some people appreciate when a person tells them what to do, while others would appreciate it if that person asked for their approval and opinions.

If at any point, we feel that someone could learn to communicate in a way that suits us personally, a friendly discussion is encouraged.**"**

"When we each take on a task, we own the responsibility for that task. We can help each other but we will always be responsible for the outcome of what was in our charge.

In this way, we are all leaders and accept that we will be judged as such. We will accept the consequences of our actions and learn from our failures if we fail.**"**

"As with life itself, a project is chaos. We will acknowledge setbacks, failures, changes to our structure, changes in our responsibilities. And so we will succeed through hard work, good planning, and an embracement of spontaneity.**"**

"Our team will strive to adopt 'best practices.' We will strive do our work and communicate as effectively and efficiently as possible. Doing so will teach us good habits for our future work.**"**

A Code of Ethics

1. We will respect our teammates and any cultural differences between us. Constructive criticism to address shortcomings is respect.

2. We have a responsibility to the company we choose to represent, our teacher Leigh Jin, San Francisco State University, ourselves, and our fellow teammates. Our actions reflect

on those we are responsible to. So, we will conduct ourselves professionally and with integrity to avoid harm to the parties we represent. Striving to do good for those we are responsible to.

3. As a team, we will strive to support each other. If a teammate lags but means well and works hard, we will accept these lags as part of their learning process and do our part to help our teammate grow. If a teammate doesn't pull their weight and makes no effort to improve, they know that they will receive a bad peer review and may be cut loose.

4. Our team is at its most effective when the team transcends the project. We will work to know each other as friends. We will support each other's aspirations and help each other become more than we would be if we were alone.

5. We will not be party to corrupt and destructive businesses.

Business Case

(Finished on 9/30/2017)

Executive Summary

In order to attract new members and increase awareness of the Information System Association (iMSA),a student organisation located at San Francisco State University (SFSU), Team 6 proposes an update to the iMSA website that will add new services and features. Team 6 has named this project "iMSA Website Update A"

Examined below are our project goals and introduction. We will show our desired areas of impact in an easily read table before examining them in depth. Most of these desired areas of impact will be visually illustrated with a graphic that shows the desired value of the project.

Two alternatives to our chosen project will be examined and compared to our choice with by breaking down the TCO and TBO of all three options. Following that will be a NPV / ROI analysis of our chosen project. This business case will conclude with our recommendation that Team 6 update the iMSA website instead of pursue the two alternatives we have listed.

Project Goal

Our overall project goal is improvement to the iMSA website: to add utility for members, and to help officers gather more useful data. This project's MOV is a website of greater use that will help create a greater influx of new members next season, more attention from SFSU, and create utility for officers. Specifically, this project will be successful if it increases student memberships by at least 60% during next year's recruitment season and if it reduces the time of decision making for officers from 3-4 hours to 1 hour a day.

iMSA currently has 32 members; it is our hope that this website will aid in growing iMSA's membership to 50 active members during next year's recruitment season. President Thinh has asked for specific deliverables which are listed below. To insure that this project doesn't balloon out of control, only these deliverables will be addressed at this time; they are the scope of this project. Additional ideas that are directly relevant to the spirit expressed in these requirements are acceptable as possible additional work; this is possible because iMSA leadership is involved & giving consistent feedback. Undoubtedly, more improvements will be requested after these deliverables are completed and they can be addressed in a future project called "iMSA Website Update B."

- The website needs a solid system for accepting and processing membership fee payments (link paypal account, add Venmo payment option).
- Implement a secure and fast payment system. Current system uses Paypal which requires long transfer wait times. With our integrated payment system, bank transfers will be instant. It will reduce wait times from one day to none.
- On the officers page, contact links for current and former officers should be updated to share the same format. Every officer should have links to their linkedin and email accounts under their photos.

- The website should be well built and respectable to represent the organization well. Specifically, the website must be aesthetically pleasing and run with no bugs.
- Improvements need to be made so that the website is easy to find in google searches and on SFSU websites. (Update 10/26/17) Add hyperlink to iMSA website on SFSU's "CoB Student Organization" page.
- Remake the opportunities tab into a resources tab: This tab should include links to useful articles, a link to code academy, and include any intern opportunities available through iMSA.
- Add a blog tab: members can make blog posts here and the blog posts should have an option for reader comments. This tab will need a category section to organize blog topics.
- Add a login registration where members will list their names, contact emails, majors, phone #'s, and survey results (for matching interests among members). A private database on the website will hold this information for officer use.
- The website's systems must be upgraded to accommodate more user data and traffic. A current metric to shoot for is a website that can handle five hundred users at once.

Introduction

iMSA is a non profit SFSU club that is dedicated to giving career resources to IS and IT students. The club has become active again in the last three to four years and has been slowly and steadily growing. The outside market for IS students is helping to galvanize this growth. iMSA leadership wants the club to become bigger in size, host more events, and create more career opportunities. In the coming years, iMSA leadership hopes to turn the club into one that will bring prestige to its members, its university, and its community. A superior website is necessary for the club iMSA leadership wants to create.

By making these improvements listed above, Team 6 hopes to draw more awareness and members to iMSA. More members would make iMSA more enticing to companies that are looking for interns. Should iMSA attract more companies in this way, it would boost both the club's prestige and SFSU's prestige. As iMSA grows, it is in a better position to negotiate greater support for SFSU. In other words, the growth that these improvements will bring will beget further growth and progress towards iMSA's goal of forging a great and useful student organization.

Desired Areas of Impact

The MOV table below lists the potential areas that this project will impact and summarizes the measurable organizational value of the iMSA website.

Organizational Impact	Value	Metric	Time Frame
Strategic	New Services: Payments and membership registration through the website	Having a payment and membership registration system would decrease the turn downs by 40%.	2 months
	New opportunities: New opportunities for the members to connect to future employers.	Having a platform that provides opportunities could increase memberships by 60%.	4-6 months
	More information: Officers are provided with more useful information	Officer will receive real time alerts that can be used to improve the overall performance of the organization	2 months
Customer	Better Services: Easier registration process, faster payments and access to information	A better payment services will reduce the registration process by 1 to 2 hr per new member	1 month
	Higher Satisfaction: A website that is easy to navigate. A website that is interactive	An interactive website will increase the traffic by 70%	1 month
Organizational Impact	Value	Metric	Time Frame

Financial	Increase money/accurate budget: More memberships	Allows officers to know how much money would be spend PER member and how much money each member may bring.	1 month
	Lowers budget:	The website will provide a more accurate budget for miscellaneous expenses, it will reduce the cost of unnecessary expenses like extra food and drinks.	1 month
Operational	Higher Efficiency: Maintain logs of payments.	Having a log of payments and traffic would reduce the officers time from 4-5 hours to 1-2 hours a day.	2 months
	A mini database that will hold the information of the accounts of each members.	A mini database account will automatically match the areas of interest of the users to the opportunities that iMSA provides. This matching system reduces the work of the officers by 50%	3 months
	Payments through bank account and not Paypal	Having payment through bank account would reduce the wait time from 24-48hrs to none.	
Social	Education: Creating a platform with resources to learn more about Information Systems	A platform with resources and information would decrease the amount of hours a member spends on other websites from 1 hour to 15mns per day	3-6 months
	Build a Community: Build an IT community that will create prestige for its members	A community that creates prestige would increase the number jobs for our members by 30%	

Table 1 "Team 6" - MOV

In-depth analysis of "Desired Areas of Impact"

The current iMSA website serves about 100 students per semester. The Information System Association wants to create an interactive user-friendly website that will bring more

members to the organization. The current website counts with a link to a paypal account where the money is currently being stored, this system creates delays of 24-48 hours per transaction. The new design of the website will have its own banking system using the new bank accounts from San Francisco State University, this will reduce the waiting time by 48 hours per transaction therefore, reducing the officers work by 2-4 hours a day to only one hour a day.

In a survey conducted at the welcome night of iMSA on September 12, 2017. We found that the number one reason students want to join iMSA is to get in touch with Tech Companies and find new opportunities for their future careers. The new iMSA website plans to build a platform to help students get in touch with companies a look for new opportunities, by doing this we expect to increase memberships by 60% next semester according to the results of this survey.

One of the faulty features of the current website is the registration process of new members. The current process consists of the new member going to the iMSA website, filling out a application online, and only being able to pay through paypal. Some students reported to us that they did not own a paypal account and that it was very time consuming to create one. 40% of the students reported that they did not register when visiting the website for the first time because of how time consuming this process is. Other students reported that the membership link was not working properly when they tried to registrate. We plan to make registration easier and faster for our new members so they can get registered in less than 10 minutes using their preferred payment method.

Creating a website that is user-friendly and interactive can actually increase the traffic by 70%. The current iMSA website does not have any interactive features nor any resources that may help the Information System students in the future. In the survey conducted by iMSA we found that 70% of the students spend an average of one hour per day looking for useful information on the different University websites. The new iMSA website plans to have a whole new section dedicated to education and resources for students. This approach is expected to increase the traffic to our website by 70% and lower the research time of each of our members from 1 hour a day to only 15 minutes a day.

The website will provide real time and accurate financial information to iMSA officiers. This will help the iMSA officers decide how to manage the budget and will also eliminate unnecessary expenses. This information will come from a mini database that archives all the payments, information of the users, emails, phone numbers, surveys and interest of the members. The information from surveys and interest of the users will allow iMSA to plan for their future events in a more accurate way to prevent spending more money on undesirable activity.

The new iMSA website is planned to create an IT community among students and connect young talent to companies who are seeking the best university candidates. We plan to create a community that can be recognized in Silicon Valley as one the best communities for students who want to pursue a career in the Tech Industry. Team 6 plans to build this association by educating and bringing opportunities to our members so that they can be prepared for what the employers and companies want. Getting our members ready for what companies demand will create prestige among our students. The plan is to have companies reaching out to iMSA so that we can send them our best prepared talent. This will create a relationship between tech companies and iMSA, therefore increasing the chances for our members to obtain a job.

This project will be successful if it increases student memberships by at least 60% during next year's recruitment season and if it reduces the time of decision making for officers from 3-4 hours to 1 hour a day.

Desired Value of the Project

This is a Value Flow Chart, illustrating the areas of impact:

iMSA Website Update – Value Flow Diagram
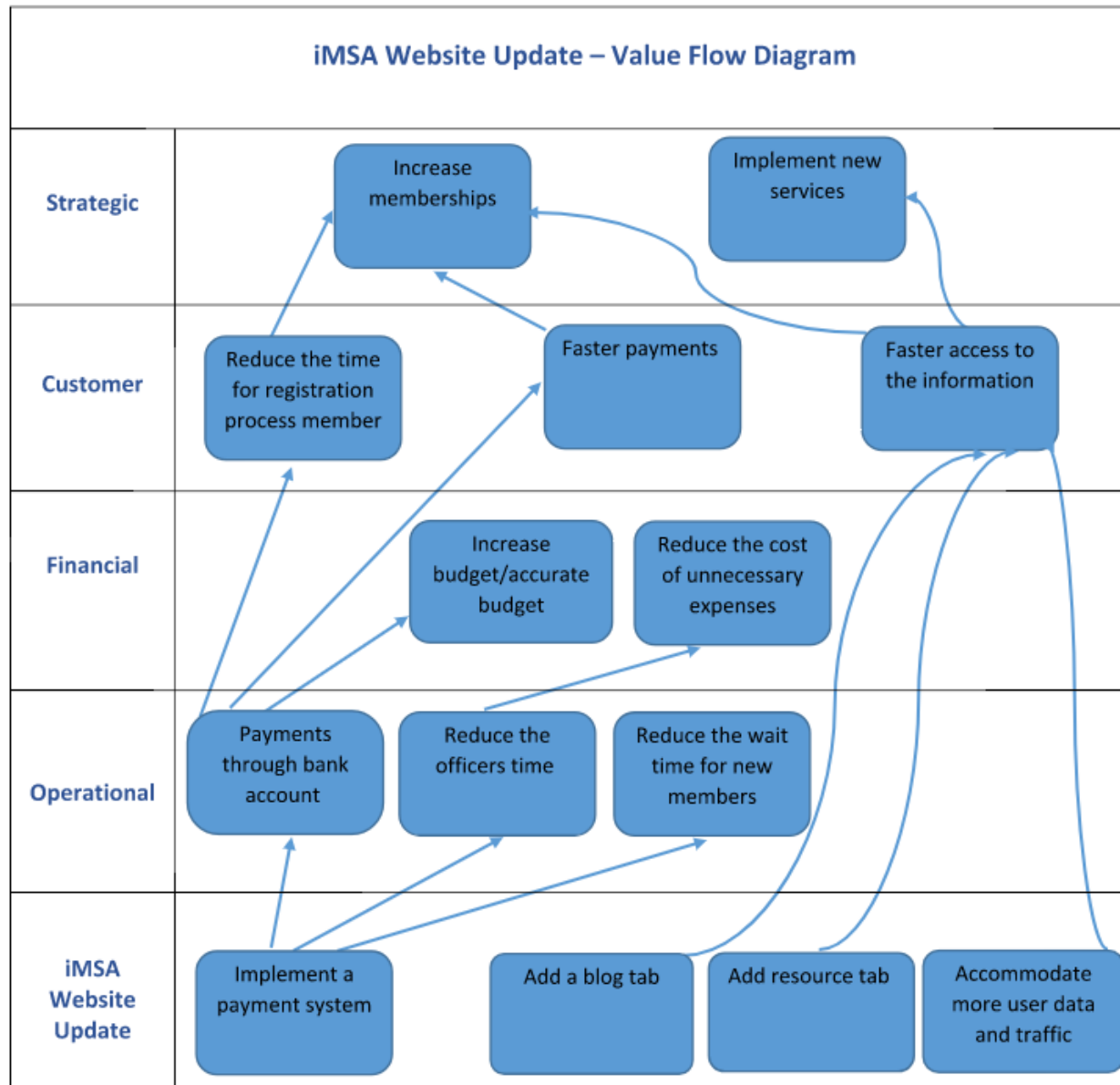
Table 2 "Team 6" - Desired Value of Project

The Value Flow Chart gives us the vision how potential improvements will positive influence on certain areas of organization such as operational, financial, customer, strategic. Diagram clear illustrates that this project will deliver better services and create value for the Information System Association (iMSA) and how the MOV is linked to the organizational goals.

Alternatives

1. Use current system. This will be referred to as *Alt 1*.

2. Design and maintain a public space online. The domain will contain required features for operation and keep users up to date with iMSA events. This system can be implemented in two ways.

    a. Create and maintain a website with WordPress that displays all news and upcoming events along with a secure payment system for membership. Wordpress is very inexpensive and cost $10/month. This website will be implemented to the SFSU official website for better exposure and we estimate to increase the traffic by at least 70%. The methods used for development requires basic design knowledge which is a requirement for all ISYS students. This can help keep our development costs at $0. This will be referred to as *Alt 2*.

    b. Create and maintain an app that will display all the features and payment options required for full operation. This alternative requires specialized developers which may be rare to come by on campus and require extra expenses. The developer would need to be paid on average of $40/hr and estimated total cost for the project to be $700. This will be referred to as *Alt 3*.

*Our team recommends updating the website with WordPress **(Alt 2)**.* We have found that the website will provide greater exposure and benefits at lower expenses. The following analysis has concluded with Alt 1 as the most effective alternative.

Total Costs of Ownership (TCO)

The following section analyzes the alternatives *Alt 1, Alt 2, Alt 3* based on Total Cost of Ownership (TCO) and Total Benefit of Ownership (TBO).

Resource	Description	*Alt 1*	*Alt 2*	*Alt 3*

Programming	@Alt 1: HTML @Alt 2: Basic Web Design @Alt 3: App Development	0	0	700
Software	@Alt 1: HTML @Alt2: Wordpress @Alt3: Mobile App	0	10	0
Maintenance	Update news and maintain the server /domain	0	0	80
Member Support	Provide necessities	80	80	0
Total		80	90	780

Table 3 "Team 6" - TCO

Total Benefits of Ownership TBO

We have included a TBO as a tool to determine the effectiveness of each alternative. This table list the benefits each alternative provides and also gives values on each alternatives effectiveness to the MOV.

Benefits	Weights	Alt 1	Weighted Alt 1	Alt 2	Weighted Alt 2	Alt 3	Weighted Alt 3

Functional							
Secure and fast payment system	12	6	0.5	9	0.75	9	0.75
Feature current news and team info	6	6	1.0	9	1.5	9	1.5
Maintain and develop domain	10	4	0.4	9	0.9	4	0.4
Provide public space for communication and exposure	12	6	0.5	9	0.75	9	0.75
Sign up process for upcoming events	5	3	0.6	9	1.8	7	1.4
Potential growth of membership	12	5	0.4	9	0.75	7	0.58
Usability							
User friendly interface	7	7	1.0	9	1.3	9	1.3
Availability	8	6	0.75	9	1.1	6	0.75
Mobile availability	8	6	0.75	9	1.1	7	0.86
Scalability	5	5	1.0	9	1.8	7	1.4
Ownership	5	5	1.0	9	1.8	7	1.4
Security	10	5	0.5	10	1	9	0.9
Weighted Benefits	*100*		*8.4*		*14.55*		*11.99*

Table 4 "Team 6" - TBO

With the TBO provided, we can concur that Alt 2 has the highest benefit relevance in regards to the MOV. When comparing the TCO and TBO Alt 2 is concluded to have the greatest weights and the lowest total for the TCO. This means that Alt 2 will have a greater effect on the goal and with a lower cost than Alt 3.

NPV / ROI

Discount Rate	6%					
	Month 0		**Month 1**		**Month 2**	
Costs	920		620		620	
Discount Factor	1		0.995		0.990	
Discounted Cost	920		616.9		613.8	

Benefits	200		200		100	
Discounted Benefit	200		199		99	
Discounted Benefits - Discounted Costs	-720		-417.9		-514.8	
Cumulative Benefits - Cumulative Costs	-720		-1137.9		-1652.7	

Table 5 "Team 6" - NPV / ROI

NPV = Total of Discounted Benefit - Total of Discounted Costs = -1652.7
ROI = NPV / Total of Discounted Cost = -76.8%

Recommendation

With the information provided it is found that creating a website is the most effective alternative when trying to create a public domain. When comparing some key features of Alt 2 and Alt 3 we can see that there are many aspects where Alt 1 provides better benefits however the expenses and development from Alt 3 could prove to be an issue. Alt 2 has lower development costs than Alt 3 and the availability will be better as well due to campus demographics. Alt 2 also comes with easy access and better exposure. Websites can be accessed without downloading anything extra and Alt 2 allows us to direct traffic from the main SFSU webpage.

As can be seen in the NPV / ROI, this project will not yield a profit nor break even during the first two months of work. Team 6 expects to see returns during next year's iMSA recruitment season. More students are projected to sign up bringing with them membership fees and drawing attention from SFSU and hiring companies. iMSA leadership does not wish to raise membership fees, we plan to break even by adding to our student organizations size and using that growth as a negotiating stand point with which to get more financial support from SFSU. This project will be profitable in the long-run!

Project Infrastructure

(Finished on 10/15/2017)

List of the Resources Needed to Complete the Project

People & Roles

- Project Manager:

- *Weston Davis*

- Project Sponsor / Subject Matter Expert (SME):

- *Thinh Tang* ("President of iMSA")
- *Lucero Davalos* ("Marketing Director of iMSA")

- Technical Expert(s) (TE):
- *Alex Tam* (Team 6 Budget Expert)
- *Olga Smirnova* (Team 6 Technical Expert)

- Additional Support from iMSA

- *Roy Agyemang* ("Website Director of iMSA:" Will be made directly aware of the goals & progression of this project and is in full support of our work. As Web Director, Roy is the primary executioner of our proposed changes. Thinh, Weston and Roy meet regularly to keep updates on track and check status.)
- *Thomas Capelle* ("Financial Director of iMSA:" Can assist with providing relevant iMSA financial information)
- *Preyansh Kotecha "PK"* ("Public Relations Director of iMSA:" PK is a computer science major and may use his knowledge to contribute to this project in a technical role.)

Technology

- *SFSU Wi-Fi Network* - for internet use on campus.

- *WhatsApp* - is an app that will provide the team and club a platform for mobile communication.
- *Facebook* - will be our platform for conference calls since there will be a group page made for the club so members can join.
- *Bluehost* - web server
- *GoDaddy* - domain to host iMSa website.
- *WordPress* CRM subscription to develop and maintain WordPress website.
- *Nagios XI* - will provide the ability to monitor the iMSA website. The benefits include increased website performance, fast detection of outages, website hijacking, and web transaction monitoring. (Later study has revealed that since we don't own the server, Nagios XI will not be necessary) (Update 12/12/17) We have decided to use Google Analytics to monitor the website instead.
- Workstations will be self provided personal computers.
- Payment gateway services (Credit and debit cards processing gateway "Stripe").
- *Paypal* - Payment gateway services for Credit and Debit cards processing of any financial transactions.
- *Balsamiq Mockups* - a graphical user interface mockup and website wireframe builder application. (Update 12/12/17) We have decided to use JustInMind to prototype the website and new updates.
- *MailChimp* - Marketing Automation (email marketing service) integrated with WordPress Plugins.
- *Google Analytics* - can monitor user activity on iMSA (replacement for our idea to use Nagios XI)
- (Update 12/7/17) *JustInMind* - is the authoring tool that we used to create our Website. One reason we chose this technology is that it also can generate HTML prototypes that can be displayed in any browser.

Facilities

- iMSA team will be having weekly meetings at San Francisco State University's library, iMSA will reserve private rooms to accommodate all the officers and technicians.
- The computer Lab at the business building will be the starting point for iMSA officers, this is where most of the work will be done since the computer lab has all the tools and technology the team needs to elaborate this project.
- The computer Lab at the computer science building will be used by Roy and PK when necessary.
- If time and place is an issue then the team will be communicating via facetime, Whatsapp and facebook messages.

Other

- **Travel:** The team will be visiting a few Tech companies and will ask for advice or suggestions that can be implemented in this project. Each member will have the obligation to implement something they learned from visiting these companies.

- **Training:** The members of theam who aren't familiar with web development will be guided and train by the other members with more experience in this matter. The officer will also be asked to spend some of their time watching tutorials on Youtube so they can have an idea of how the process will be.

- **Implementation:** Every officer and team member will be involved in the implementation, each member is required to monitor and change the project if necessary. After the project is implemented we will give members of iMSA a chance to try the website and give us feedback, this will help us make the necessary adjustments.

- **Maintenance:** The website will be maintained by the current "Web Director" of iMSA Roy, he will be in charge of maintenance and design at free of charge for now. In case that Roy is unable to attend his duty, Lucero and Thinh will be in charge of maintaining and updating the website. All officers and members are required to provide content and resources that could be useful.

An estimate for the cost of each resource.

Human Resources

Resource	Cost	Source
Project Manager	Weston is the project manager and will be making the final decisions regarding the project. Changes during planning and execution must be approved by Weston. Weston is an officer of iMSa and will not be taking a salary.	Web Project Manager at iMSA SFSU
Project Sponsor	Thinh is the President of the iMSA club of SFSU and will provide detailed information regarding the club and project. Thinh is the president of iMSa and will not be taking a salary.	President at iMSA SFSU
Website Director	Roy is the website director. Roy will administer and maintain the website. Roy is an officer of iMSa and will not be taking a salary.	iMSA Officer
Technical Experts	Thomas, Alex, Olga, & Lucero. Thomas & Lucero are officers of iMSa and will not be taking a salary. Alex & Olga are ISYS 663 students who are assigned to this project and will not be taking a salary.	iMSA Officer ISYS 663 Students
Event Speakers	Public speakers volunteer to speak to students	iMSA Alumni, Team Efforts Outreach, Advisor's Connection

Table 1 - Cost of Human Resource

Hardware / Software

Resource	Cost	Source
WordPress	The WordPress software costs the club $10 per month	www.wordpress.org
Domain	$15.99 per year	www.bluehost.com
Hosting	$299.88 per year	www.bluehost.com
Plugins	WordPress plugins will be required to implement additional functionalities. Costs of these plugins can be $0 - $5 for subscriptions.	www.wordpress.org/plugins
Payment Gateway	There is a 2.9% plus 30 cent charge on every transaction completed with Stripe.	www.paypal.com
JustInMind Prototyper	The free trial is functional for 30 days. Subscription $12 per month	https://justinmind.com/
MailChimp	There is the free version of service for new business. Next version for Growing business $10 per month.	https://mailchimp.com/

Table 2 - Cost of Hardware

Other Costs

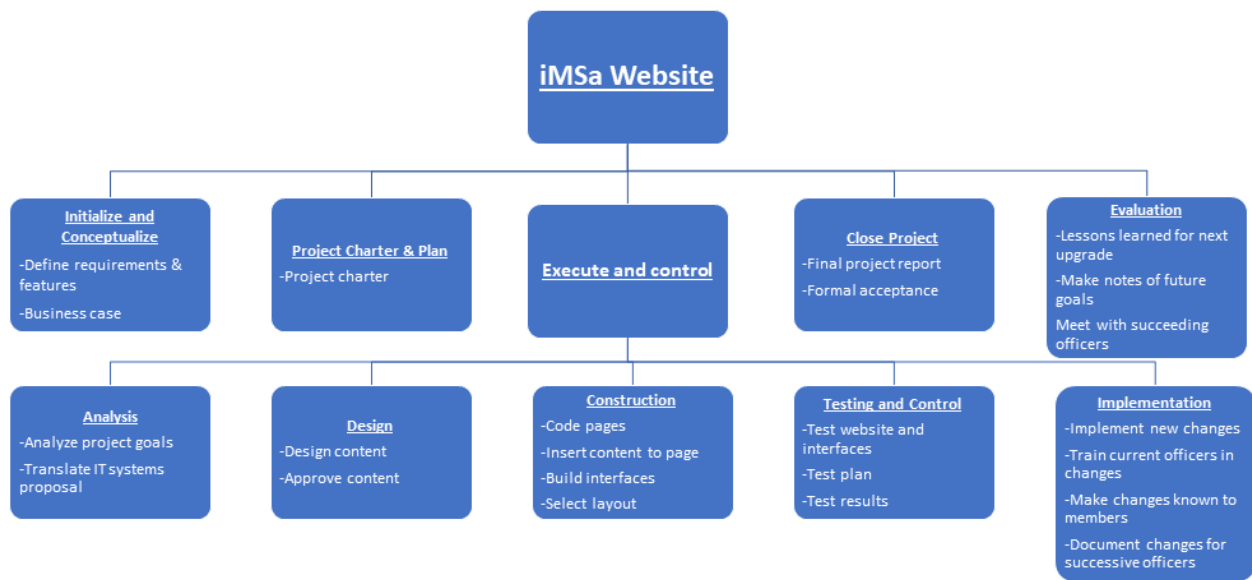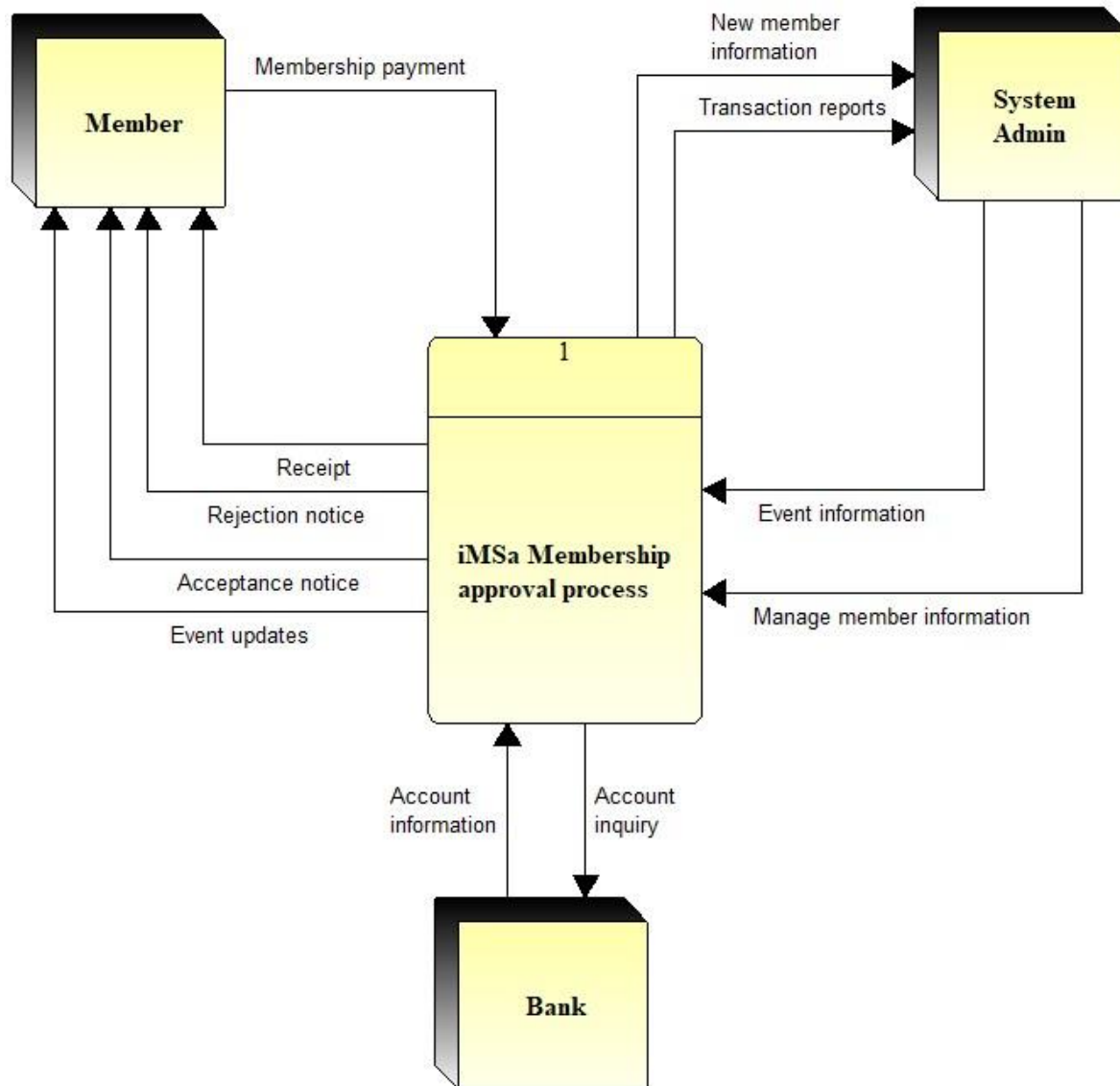| Resource	Cost	Source
Food	iMSA will be spending $160 per month on food for members attending events.	Costco and The Village Market and Pizza at San Francisco State University
Trainings	Included into the cost of systems	MailChimp Learning Resources; Stripe docs; bluehost knowledge base
Printing	iMSA budgets $25 for flyers and poster printing	Ctrl + P Digital Print Shop at San Francisco State University
Travel	iMSA will reimburse transportation and travel expenses for our officers, members, and speakers.	External
Commodities	Gifts such as a iMSA mug, clothing which can cost $12 - $40.	Cimpress N.V - Brand: Vistaprint

Table 3 - Cost of Other Expenses
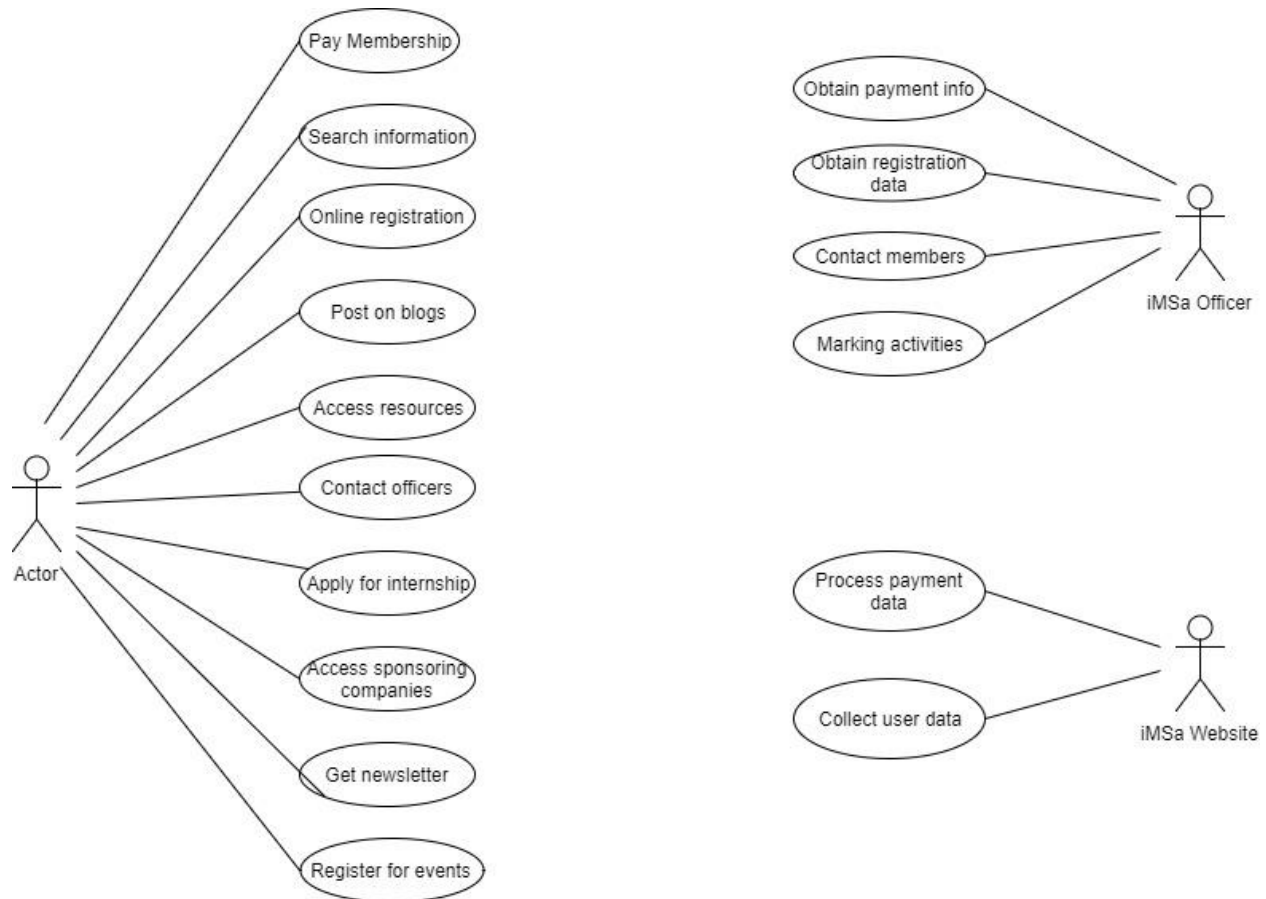
The Scope Management Plan

(Finished on 10/30/2017)

Deliverable Structure Chart (DSC)

iMSa Website

Initialize and Conceptualize
-Define requirements & features
-Business case

Project Charter & Plan
-Project charter

Execute and control

Close Project
-Final project report
-Formal acceptance

Evaluation
-Lessons learned for next upgrade
-Make notes of future goals
Meet with succeeding officers

Analysis
-Analyze project goals
-Translate IT systems proposal

Design
-Design content
-Approve content

Construction
-Code pages
-Insert content to page
-Build interfaces
-Select layout

Testing and Control
-Test website and interfaces
-Test plan
-Test results

Implementation
-Implement new changes
-Train current officers in changes
-Make changes known to members
-Document changes for successive officers

Data Flow Diagram (DFD)

Use Case Diagram (UCD)

Scope Change Process

Deliverables Dictated in Business Plan

- The website needs a solid system for accepting and processing membership fee payments (link paypal account, add Venmo payment option).

- Implement a secure and fast payment system. Current system uses Paypal which requires long transfer wait times. With our integrated payment system, bank transfers will be instant. It will reduce wait times from one day to none.

- On the officers page, contact links for current and former officers should be updated to share the same format. Every officer should have links to their linkedin and email accounts under their photos.

- The website should be well built and respectable to represent the organization well. Specifically, the website must be aesthetically pleasing and run with no bugs.

- Improvements need to be made so that the website is easy to find in google searches and on SFSU websites. (Update 10/26/17) Add hyperlink to iMSA website on SFSU's "CoB Student Organization" page.

- Remake the opportunities tab into a resources tab: This tab should include links to useful articles, a link to code academy, and include any intern opportunities available through iMSA.

- Add a blog tab: members can make blog posts here and the blog posts should have an option for reader comments. This tab will need a category section to organize blog topics.

- Add a login registration where members will list their names, contact emails, majors, phone #'s, and survey results (for matching interests among members). A private database on the website will hold this information for officer use.

- The website's systems must be upgraded to accommodate more user data and traffic. A current metric to shoot for is a website that can handle five hundred users at once.

Rules for Additions and Alterations to our Deliverables

1. All additions or alterations must be proposed to the project manager (Weston Davis) & Project Owner (Thinh Tang). The Project Manager and Project Owner must jointly accept a change for it to become official.

2. An oral proposal of additions or alterations is fine but any changes that are accepted by the project manager will be added to the Business Plan deliverables, in writing, prefaced with (Update MM/DD/YY).

3. Any proposed changes have to be directly relevant to the original deliverables. An example would be having a great idea for some feature to add to our blog tab, which is a deliverable for this project.

4. Any changes are most likely to be approved, and are encouraged, if they have been proven to be necessary to complete the original deliverables.

5. No additions and alterations that are estimated to take longer than a day's time to complete will be accepted; unless this change is critical to complete an accepted deliverable. These proposals will be logged in the Project Manager's "Future Update Ideas" document which will be shared with succeeding iMSA officers.

Measures of Project Success

This section describes the metrics that will be used on the project to determine how success will be measured. Such metrics might include how to measure customer satisfaction or might state what a "user friendly" system is

- Completing the deliverables are obvious measures of success.
- Making the website easier to find will draw in more attention of prospective members
- Completing deliverables that encourage interactivity may raise member involvement in iMSA
- Some of this project's deliverables will make the iMSA website more user friendly
- Completing deliverables that give both officers and members more resources to use.

Critical Success Factors

Describe those factors that will ensure the success or failure of the project. For example, the Organization Change Management Plan will be accepted, the system infrastructure environment will be adequate, etc..

There are two critical success factors for this project

1. Create documentation that will be useful to future iMSA officers when they make future website updates (Phase 1 & 3).

The 1st Critical Success Factor will be fulfilled naturally by the work required from ISYS 663. We will then make all these documents available to next semester's iMSA officers.

2. Either fulfill or set plans to fulfill a minimum of six Phase 2 deliverables before February 1st, 2018.

The 2nd Critical Success Factor is underway. We have set a minimum because we believe that six are achievable and do not yet know if it is feasible or possible to complete all nine original deliverables within that time box. Any deliverables that are not completed will be added to the Project Managers "Future Update Ideas" document.

Authorizations

This section sets out who has authority to approve scope statement, authorize project changes, approve and accept project deliverables.

Project deliverables will be approved/accepted by:

The Project Owner

The Project Sponsor

The Scope Statement will be approved by:

The Project Manager

The Project Owner

The Project Sponsor

Project Changes will be approved by:

The Project Manager

The Project Owner

The Work Breakdown Structure

(Finished on 11/15/2017)

The Work Breakdown Structure

The project *iMSA Website Update A* declared the deliverables on the Deliverable Structure Chart from the Project Scope document. Everything else related to the phases, deliverable milestones, activities and tasks will be disclosed on this document.

Project Phases

Phase 1. Organization & Documentation

Tasks include determining the deliverables, scope, and other organizational aspects of this project that will be used to guide the implementation of the project.

This phase will conclude at the end of the Fall 2017 semester.

Phase 2. Documentation is Implemented

The Team will give documents over to iMSA officers Weston Davis & Roy Anguiano for implementation.

Tasks include all deliverables from Team's Business Case Document, the deliverables include:

- Establish payment support for major payment options
- Implement new payment system
- Design new officer contact page
- Design an aesthetic iMSa website
- Improve online search ranking and relevance
- Redesign and implement opportunities tab into resources tab
- Design and implement a space for members to blog
- Research and upgrade website capability

This phase will begin after the Business Case documentation is shared with iMSA officers and will conclude no later than February 1st, 2018.

<u>Phase 3. Pass on Unfulfilled Deliverables to Successors</u>

iMSA officers Weston Davis & Roy Anguiano will prepare to give tasks over to next generation of iMSA officers. Tasks include preparation, training, creating manuals and meetings.

This phase will begin once an end date has been settled on and end on that same date. Will conclude no later than March 1st, 2018 (Possibly sooner).

Tasks, Deliverables and Milestones

The WBS chart below illustrates the phases of the project, major tasks, subtasks, their deliverables, and milestones for the iMSa website reconstruction. The table also displays the resource assignments and estimated time to complete each task. The project will begin with the development of the project plan. In this phase we will prepare the documents in a complete project plan. The second phase is the execution of the project plan. The website will be upgraded regarding the following requirements. And the final phase will be the process of transferring ownership to the new iMSa officers. Each Document and Deliverable represents a milestone; they are made up of sub-tasks.

Estimation Techniques

The iMSA Team used a combination of estimation techniques such as: the bottom up method and the delphi method. iMSA Team has support from experts on building websites, the experts gave iMSA an estimation of how long each task would take and how much money it will cost. Based on the estimations from the experts iMSA Team assigned resources to each tasks on the following WBS chart. All three phases have a start to finish attribute. The completion of the previous phase is necessary for the next phase to be successful. Phase 1: Organization & Documentation is the first phase of the project and has given a projected 73 days to complete. Second phase consists of Documentation Implementation and this will be the execution of the project planning. This phase is projected to finish in 101 days after completion of Phase 1. The final phase Pass on Unfulfilled Deliverables to Successors will require the current team to introduce and train the upcoming iMSa members and officers. Majority of tasks in Phase 2 can be completed simultaneously.

The bottom-up method was used to estimate all other activities that did not require an expert, such as preparing documents, preparing manuals, creating charts and other activities.

iMSA WBS CHART

				Duration	Start	Finish	
1		📌	▲ **Phase 1: Organization & Documentation**	**73 days**	**Fri 9/1/17**	**Fri 12/8/17**	
2	👤	📌	▲ **Team Charter (MS)**	**6 days?**	**Fri 9/1/17**	**Fri 9/8/17**	
3	⊞	🔷	Come up with a name that represents the team	6 days?	Fri 9/1/17	Fri 9/8/17	
4	⊞	🔷	Give a project overview and define the scope	6 days?	Fri 9/1/17	Fri 9/8/17	
5	⊞	🔷	List all names and contact of each team member	6 days?	Fri 9/1/17	Fri 9/8/17	
6	⊞	🔷	Agree upon meeting times	6 days?	Fri 9/1/17	Fri 9/8/17	
7	⊞	🔷	Create a list of rules and expectations	6 days?	Fri 9/1/17	Fri 9/8/17	
8	⊞	🔷	Create a code of Ethics	6 days?	Fri 9/1/17	Fri 9/8/17	
9	⊞	🔷	Have each member read and sign this document	6 days?	Fri 9/1/17	Fri 9/8/17	
10	👤	📌	▲ **Business Case (MS)**	**17 days?**	**Fri 9/8/17**	**Sat 9/30/17**	2
11	⊞	🔷	Come up with a name that represents the project	17 days?	Fri 9/8/17	Sat 9/30/17	
12	⊞	🔷	Identify all members of the team and their roles	17 days?	Fri 9/8/17	Sat 9/30/17	
13	⊞	🔷	Provide a brief description of the project	17 days?	Fri 9/8/17	Sat 9/30/17	
14	⊞	🔷	Come up with a Measurable Organizational Value (MOV)	17 days?	Fri 9/8/17	Sat 9/30/17	
15	⊞	🔷	Identify the desired area of impact	17 days?	Fri 9/8/17	Sat 9/30/17	
16	⊞	🔷	Identify the desired value of the IT project	17 days?	Fri 9/8/17	Sat 9/30/17	
17	⊞	🔷	Develop an appropriate metric	17 days?	Fri 9/8/17	Sat 9/30/17	
18	⊞	🔷	Set a time frame for achieving the MOV	17 days?	Fri 9/8/17	Sat 9/30/17	
19	⊞	🔷	Summarize the MOV in a Statement	17 days?	Fri 9/8/17	Sat 9/30/17	

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	
20	⊞	⭲	Compare Alternatives	17 days?	Fri 9/8/17	Sat 9/30/17	
21	⊞	⭲	Calculate the Total cost of ownership	17 days?	Fri 9/8/17	Sat 9/30/17	
22	⊞	⭲	Calculate the Total Benefits of ownership	17 days?	Fri 9/8/17	Sat 9/30/17	
23	⊞	⭲	Develop a Weighted Scoring model to compare alternatives	17 days?	Fri 9/8/17	Sat 9/30/17	
24	⊞	⭲	Create Recommendations based on the weighted scoring model	17 days?	Fri 9/8/17	Sat 9/30/17	
25	⊞	⭲	Create a NPV and ROI analysis for our recommendation	17 days?	Fri 9/8/17	Sat 9/30/17	
26	🔴	📌	◢ Project Infastructure (MS)	12 days?	Sat 9/30/17	Sun 10/15/17	1
27	⊞	⭲	Create a list of the resources needed to complete the project	12 days?	Sat 9/30/17	Sun 10/15/17	
28	⊞	⭲	Define the roles of each member	12 days?	Sat 9/30/17	Sun 10/15/17	
29	⊞	⭲	Estimate the technology resources that will be needed	12 days?	Sat 9/30/17	Sun 10/15/17	
30	⊞	⭲	Define where the project team will do most of the work	12 days?	Sat 9/30/17	Sun 10/15/17	
31	⊞	⭲	Define the training that will be needed	12 days?	Sat 9/30/17	Sun 10/15/17	
32	⊞	⭲	Define if the team has to travel and the travel allowance	12 days?	Sat 9/30/17	Sun 10/15/17	
33	⊞	⭲	Define who has to be present on the day of implementation	12 days?	Sat 9/30/17	Sun 10/15/17	
34	⊞	⭲	Define who will be giving maintenance to the website and how often	12 days?	Sat 9/30/17	Sun 10/15/17	
35	⊞	⭲	Estimate the cost of each resource	12 days?	Sat 9/30/17	Sun 10/15/17	

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	
36	⊞	⭲	Include references to all the resources	12 days?	Sat 9/30/17	Sun 10/15/17	
37	🔴	📌	◢ Project Scope Management Plan (MS)	12 days?	Sun 10/15/17	Mon 10/30/17	2
38	⊞	⭲	Create a Deliverable Structure Chart (DSD)	12 days?	Sun 10/15/17	Mon 10/30/17	
39	⊞	⭲	Create a use case diagram (UCD)	12 days?	Sun 10/15/17	Mon 10/30/17	
40	⊞	⭲	Draw a box to represent system boundary	12 days?	Sun 10/15/17	Mon 10/30/17	
41	⊞	⭲	Draw stick figures to represent users	12 days?	Sun 10/15/17	Mon 10/30/17	
42	⊞	⭲	Draw ovals to represent functions	12 days?	Sun 10/15/17	Mon 10/30/17	
43	⊞	⭲	Draw a connecting line between users and functions	12 days?	Sun 10/15/17	Mon 10/30/17	
44	⊞	⭲	Create a scope change process	12 days?	Sun 10/15/17	Mon 10/30/17	
45	🔴	📌	◢ WBS Report (MS)	13 days?	Mon 10/30/17	Wed 11/15/17	3
46	⊞	⭲	Define the phases of the project	13 days?	Mon 10/30/17	Wed 11/15/17	
47	⊞	⭲	Define milestones for each phase and deliverables	13 days?	Mon 10/30/17	Wed 11/15/17	
48	⊞	⭲	Define all the activities/tasks for each deliverable	13 days?	Mon 10/30/17	Wed 11/15/17	
49	⊞	⭲	Assign people and resources to each activity	13 days?	Mon 10/30/17	Wed 11/15/17	
50	⊞	⭲	Develop an estimate for each activity	13 days?	Mon 10/30/17	Wed 11/15/17	
51	🔴	📌	◢ Schedule & Budget Report (MS)	12 days	Wed 11/15/17	Thu 11/30/17	4
52	⊞	⭲	Create a detailed project plan	12 days?	Wed 11/15/17	Thu 11/30/17	
53	⊞	⭲	Continue working on the WBS	12 days?	Wed 11/15/17	Thu 11/30/17	
54	⊞	⭲	Add and assign resources for all the new activities	12 days?	Wed 11/15/17	Thu 11/30/17	

Ready   ⭲ New Tasks : Auto Scheduled

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	
55	▦	🔁	Make sure to have assigned costs for all activities	12 days?	Wed 11/15/17	Thu 11/30/17	
56	▦	🔁	Link the tasks, perform tasks in parallel if necessary	12 days?	Wed 11/15/17	Thu 11/30/17	
57	▦	🔁	Clearly state the beginning and end dates of the project	12 days?	Wed 11/15/17	Thu 11/30/17	
58	▦	🔁	Clearly state how many days it will take to complete	12 days?	Wed 11/15/17	Thu 11/30/17	
59	▦	🔁	Define if the project has multiple or a single critical paths	12 days?	Wed 11/15/17	Thu 11/30/17	
60	▦	🔁	Define the importance of the critical path	12 days?	Wed 11/15/17	Thu 11/30/17	
61	▦	🔁	Clearly state the budget for the project	12 days?	Wed 11/15/17	Thu 11/30/17	
62	🔴	📌	◢ **Lesson-Learned Report (MS)**	**7 days**	**Thu 11/30/17**	**Fri 12/8/17**	5
63	▦	🔁	Clearly state if the project met the scope, time and cost goals	7 days?	Thu 11/30/17	Fri 12/8/17	
64	▦	🔁	Define the the success criteria listed in the project scope statement	7 days?	Thu 11/30/17	Fri 12/8/17	
65	▦	🔁	Reflect on whether or not the project success criteria was met	7 days?	Thu 11/30/17	Fri 12/8/17	
66	▦	🔁	Reflect on the main lessons the team learned on this project	7 days?	Thu 11/30/17	Fri 12/8/17	
67	▦	🔁	Define what went right on this project	7 days?	Thu 11/30/17	Fri 12/8/17	
68	▦	🔁	Define what went wrong on this project	7 days?	Thu 11/30/17	Fri 12/8/17	
69	▦	🔁	Reflect on what would the team do different on the next project based on the experiences from this project.	7 days?	Thu 11/30/17	Fri 12/8/17	

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	
70		📌	◢ **Phase 2: Documentation is Implemented**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
71	🔴	📌	◢ **Establish payment support for major payment options (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
72		🔁	Research major payment options	1 day?	Sat 9/30/17	Sat 9/30/17	
73		🔁	Subscribe to payment services	1 day?	Sat 9/30/17	Sat 9/30/17	
74	▦	🔁	Establish payment support for major payment options (MS)	0 days	Thu 2/15/18	Thu 2/15/18	
75	🔴	📌	◢ **Implement new payment system (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
76		🔁	Establish and test new payment features on website	1 day?	Sat 9/30/17	Sat 9/30/17	
77	🔴	📌	◢ **Design new officer contact page (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
78		🔁	Record officer contact information	1 day?	Sat 9/30/17	Sat 9/30/17	
79		🔁	Document and implement officer contact information	1 day?	Sat 9/30/17	Sat 9/30/17	
80	🔴	📌	◢ **Improve online search ranking and relevance (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
81		🔁	Research popular keywords and search results	1 day?	Sat 9/30/17	Sat 9/30/17	
82		🔁	Implement new iMSA website URL to SFSU website	1 day?	Sat 9/30/17	Sat 9/30/17	
83	🔴	📌	◢ **Design an aesthetic iMSA website (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
84		🔁	Design iMSA graphics and color theory	1 day?	Sat 9/30/17	Sat 9/30/17	
85		🔁	Implement new aesthetic design	1 day?	Sat 9/30/17	Sat 9/30/17	
86	🔴	📌	◢ **Redesign and implement opportunities tab into resources tab (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
87		🔁	Remove opportunities tab	1 day?	Sat 9/30/17	Sat 9/30/17	
88		🔁	Design and implement resources tab	1 day?	Sat 9/30/17	Sat 9/30/17	
89	🔴	📌	◢ **Implement blog space on website (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
90		🔁	Design blog infrastructure	1 day?	Sat 9/30/17	Sat 9/30/17	
91		🔁	Implement blog page	1 day?	Sat 9/30/17	Sat 9/30/17	
92	🔴	📌	◢ **Implement login registration and survey interface (MS)**	**101 days**	**Sat 9/30/17**	**Thu 2/15/18**	
93		🔁	Build login and survey interfaces	1 day?	Sat 9/30/17	Sat 9/30/17	
94		🔁	Implement new interfaces	1 day?	Sat 9/30/17	Sat 9/30/17	

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾
94		🖥	Implement new interfaces	1 day?	Sat 9/30/17	Sat 9/30/17
95	🔴	📌	◢ Develop database for website information (MS)	101 days	Sat 9/30/17	Thu 2/15/18
96		🖥	Design database concept	1 day?	Sat 9/30/17	Sat 9/30/17
97		🖥	Build database infrastructure	1 day?	Sat 9/30/17	Sat 9/30/17
98		🖥	Integrate database with website	1 day?	Sat 9/30/17	Sat 9/30/17
99	🔴	📌	◢ Upgrade website capability (MS)	101 days	Sat 9/30/17	Thu 2/15/18
100		🖥	Research ways to improve user capability	1 day?	Sat 9/30/17	Sat 9/30/17
101		🖥	Purchase new service	1 day?	Sat 9/30/17	Sat 9/30/17
102		🖥	Implement new service	1 day?	Sat 9/30/17	Sat 9/30/17
103		📌	◢ Phase 3: Pass on Unfulfilled Deliverables to Successors	21 days	Thu 2/1/18	Thu 3/1/18
104	🔴	📌	◢ Have All Documentation Ready (MS)	21 days	Thu 2/1/18	Thu 3/1/18
105	🔴	📌	Make a list of fulfilled tasks	21 days?	Thu 2/1/18	Thu 3/1/18
106	🔴	📌	Make a list of unfulfilled tasks	21 days?	Thu 2/1/18	Thu 3/1/18
107		📌	Have the system documentation ready	21 days?	Thu 2/1/18	Thu 3/1/18
108		📌	Develop System flowcharts	21 days?	Thu 2/1/18	Thu 3/1/18
109		📌	Deliver source code	21 days?	Thu 2/1/18	Thu 3/1/18
110		📌	Create a System documentation manual	21 days?	Thu 2/1/18	Thu 3/1/18
111		📌	Create training materials	21 days?	Thu 2/1/18	Thu 3/1/18
112		📌	Create functional specs	21 days?	Thu 2/1/18	Thu 3/1/18
113		📌	Develop guidelines for new members	21 days?	Thu 2/1/18	Thu 3/1/18
114		📌	Create user training manuals	21 days?	Thu 2/1/18	Thu 3/1/18
115	🔴	📌	Upload lists and all documents to Google Drive folder "iMSA Fall 2017"	21 days?	Thu 2/1/18	Thu 3/1/18

	ⓘ	Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	
115	🔴	📌	Upload lists and all documents to Google Drive folder "iMSA Fall 2017"	21 days?	Thu 2/1/18	Thu 3/1/18	
116	🔴	📌	◢ Train New Officers (MS)	21 days	Thu 2/1/18	Thu 3/1/18	
117		📌	Create a document with expectations from new members	21 days?	Thu 2/1/18	Thu 3/1/18	
118		📌	Identify the members and their roles	21 days?	Thu 2/1/18	Thu 3/1/18	
119		📌	Construct a training schedule	21 days?	Thu 2/1/18	Thu 3/1/18	
120	🔴	📌	Meet with succeeding officers and discuss "iMSA Website Update A"	21 days?	Thu 2/1/18	Thu 3/1/18	
121		📌	Train the new IT support	21 days?	Thu 2/1/18	Thu 3/1/18	
122		📌	Train them on how to use the resources	21 days?	Thu 2/1/18	Thu 3/1/18	

iMSA WEBSITE GANTT CHART

Resources assigned to tasks:

Human Resources:

      Alex Tam

      Olga Smirnova

      Roy Anguiano

      Thinh Tang

      Weston Davis

      Lucero Vizcarra

Technical Resources:

      Domain

      Web Server Host

      WordPress Subscription

      Theme Marketplaces

      Google Drive (Google Docs)

      Microsoft Project

Acceptance and Approval:

The signatures below indicate acceptance and approval of the Work Breakdown Structure of the

iMSA Website project and its estimated schedule.

Name	Title/Role	Company	Signature
Weston Davis	Project Manager	iMSA website update A	Weston R. Davis
Thinh Tang	Sponsor	President of iMSA	Thinh Tang
Lucero Davalos	Sponsor	Marketing Director of iMSA	Lucero Davalos
Alexander Tam	Technical Expert	iMSA website update A	Alexander Tam
Olga Smirnova	Technical Expert	iMSA website update A	Olga Smirnova

The Project Schedule & Budget

(Finished on 11/30/2017)

Foreword

Team 6 needs to make two announcements regarding the assigned aspects of this document.

1st,

Team 6 is building its documents for iMSA, a non-profit student organization. More than half of the individuals responsible for completing the tasks of "iMSA Website Update A" are members of Team 6, performing work for school and not pay. As such, our listed budget reflects these facts and is a rare example of a large work that can be achieved with minimal funding.

2nd,

On 11/30/2017, Team 6's planned meeting at school was interrupted by a campus blackout that closed all the computer labs at San Francisco State University. This prevented Team 6 from being able to use school computers to put the final edits on our microsoft project file. Thankfully, we had worked diligently throughout this week and gotten our project file into a strong state. Had we been able to meet today, we would have ensured that all resources were not over allocated and made updates to phase 2 that would reflect completed tasks.

Schedule
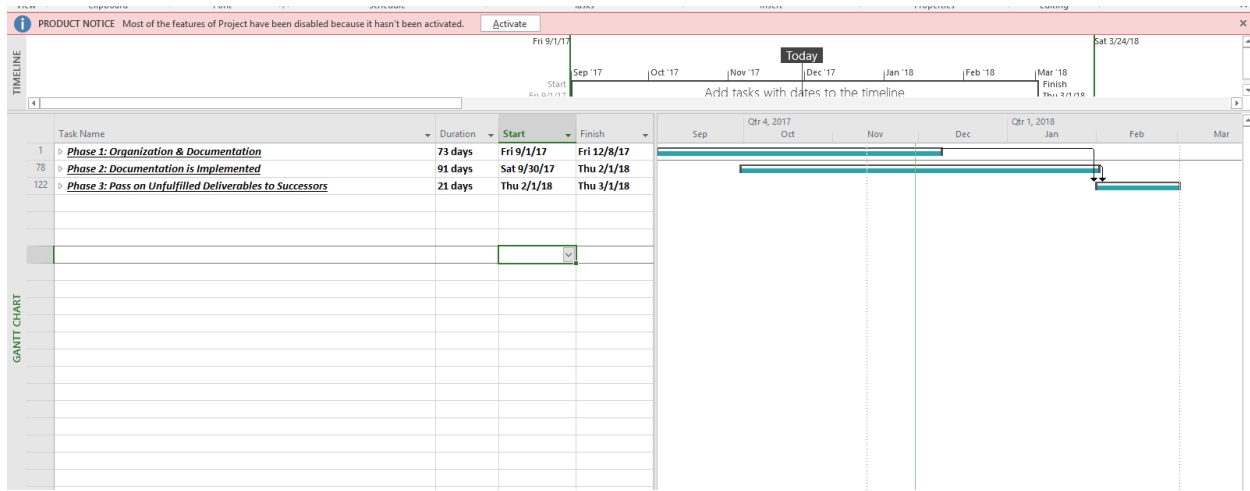
Here is the overall schedule of the project. It is broken into three phases which can be seen here in summary and below in detail.

- **Project Beginning Date:**   September 1st, 2017

- **Project End Date:**   March 1st, 2018

- **Total Number of Days:**   185 days
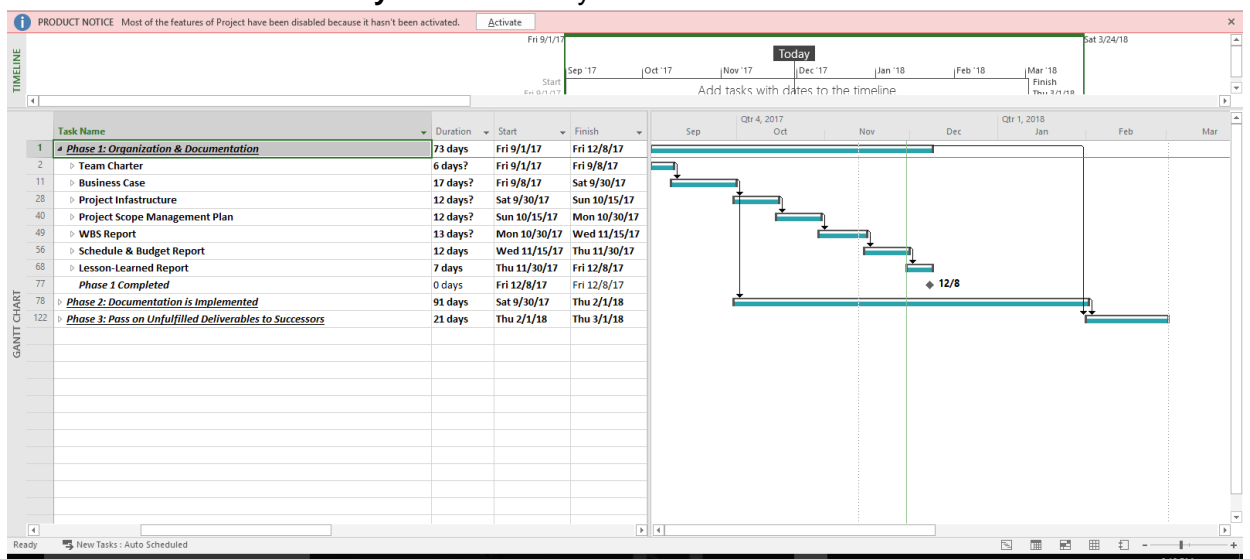
Phase 1. Organization & Documentation

Tasks include determining the deliverables, scope, and other organizational aspects of this project that will be used to guide the implementation of the project. Phase 1 *begins on* 9/1/2017, *ends on* 12/8/17, and *will take place over* 73 days.
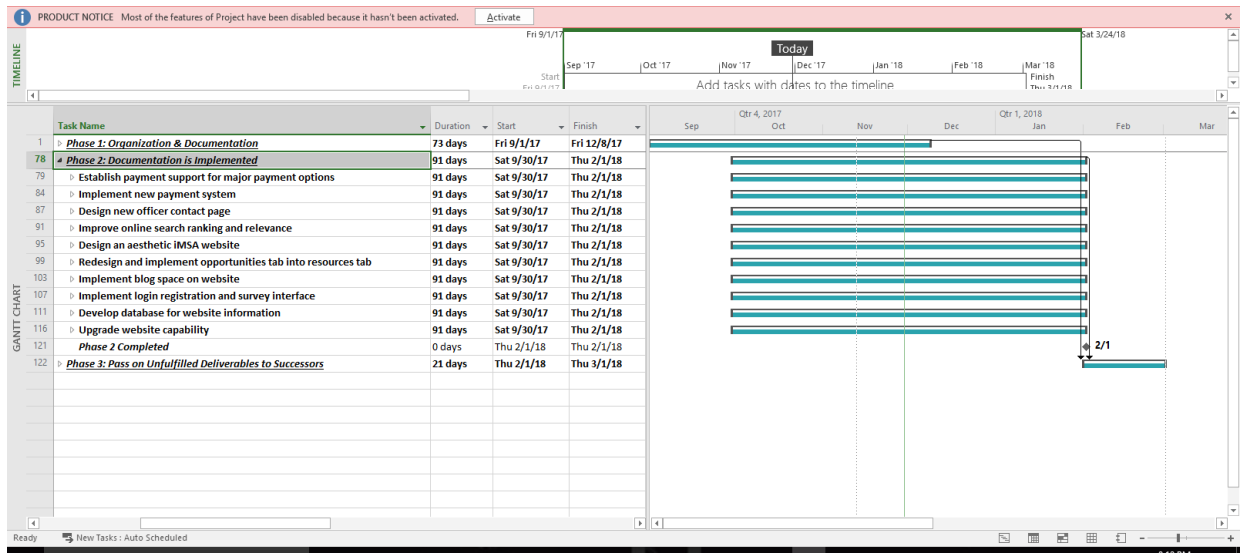
Phase 2. Documentation is Implemented

The Team will give documents over to iMSA officers Weston Davis & Roy Anguiano for implementation. Tasks include all deliverables from Team's Business Case Document. Phase 2 *begins on* 9/30/2017, *ends on* 2/1/17, and *will take place over* 91 days.
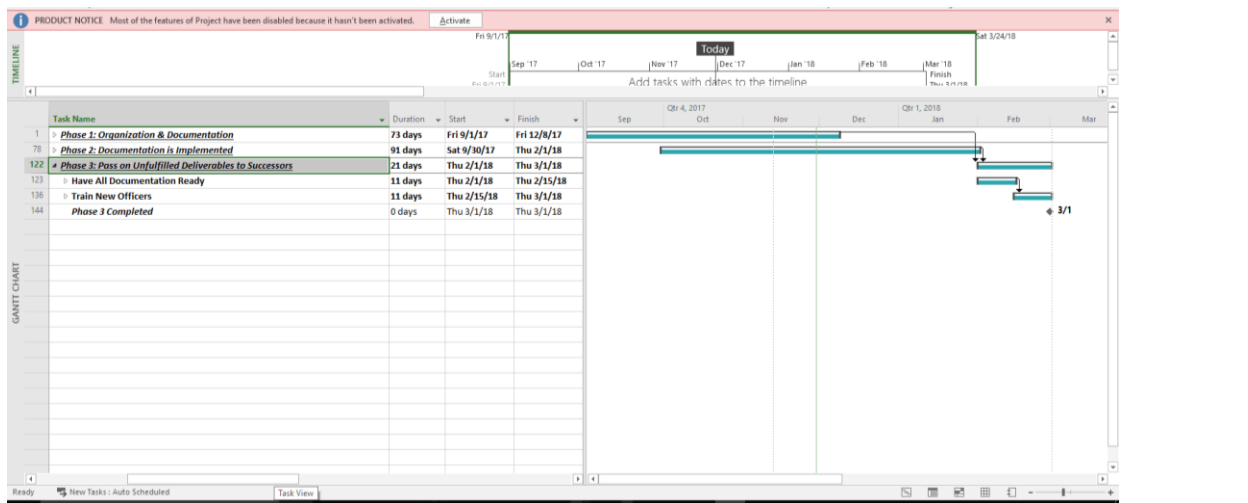
Phase 3. Pass on Unfulfilled Deliverables to Successors

iMSA officers Weston Davis & Roy Anguiano will prepare to give tasks over to next generation

of iMSA officers. Tasks include preparation, training, creating manuals and meetings. Phase 3

begins on 2/1/2017, *ends on* 3/1/17, and *will take place over* 21 days.

Critical Path Analysis

All the tasks in Phase 1 "Organization and Documentation" were designed to be Finish-to-Start due to the fact that each document complements the next document. It is necessary to complete one document before the next one.

The tasks in Phase 2 "Documentation and Implementation" were assigned Start-to-Start. The team agreed that we could save time by having all the tasks running parallel. We will adjust the lag time according to the needs of iMSA officers

In Phase 3 "Pass Deliverables to future iMSA offices" the tasks will be Finish-to-Start since the iMSA team needs to have all documentation and protocol ready before training the new offices. It is very important to have all the rules and code of ethics laid out before the new offices agree to join iMSA.

Budget

Annual Project Budget Report 03/01/2017			
Total Project Budget: $613			
Project Expenses	Budgeted Cost	Actual Cost	Remaining Budget
Wordpress	$90	$70	$543
Bluehost domain and hosting	$320	$316	$227
PayPal payment gateway	$50	$58	$169

JustInMind Prototyper	$8	$0	$169
MailChimp	$90	$0	$169
Eventbrite	$55	$0	$169
Total	$613	$444	

Summary

1. What are beginning and end dates for your project? How many days will it take to complete the project?

- **Project Beginning Date:**   September 1st, 2017

- **Project End Date:**   March 1st, 2018

- **Total Number of Days:**   185 days

2. Does your project have a single or multiple critical paths? What is the importance of the critical path?

Project has a single critical path.

The critical path is the sequence of activities in a project plan which must be completed on time to complete the project on due date. An activity on the critical path cannot be started until the previous activity is complete. The critical path define the longest time taken to complete the project.
The reason the critical path is important because if there is a delay in any one task (activities) it will extend the length of entire project.

3.   What is the total budget of your project?

As shown in the budget report, the total annual budget of the project for the year is $613.

Lessons Learned

(Finished on 12/17/2017)

Overview

- **Project Name:**

"iMSA Website Update A"

- **Project Sponsor:**

Thinh Tang: "President or iMSA" & Lucero Davalos: "iMSA Director of Marketing"

- **Project Manager:**

Weston Davis: "Project Manager of iMSA Website Update A"

- **Project Dates:**

September 1st, 2017 to March 1st, 2018

- **Final Budget:**

$444

Did the project meet scope, time, and cost goals?

The project was very successful in regards to scope, time, and cost goals. The scope of work consisted of many tasks that could be completed with our Project Management team.

Phase 1 would reflect our time here during ISYS 663. Phase 2 & 3 will take place during the iMSA team's Spring 2018 semester. We had set the scope of work to reflect our semester so that we would be able to complete all organizational tasks before some of us graduated. Phase 2 & 3 and projected to be on schedule and the officers that graduate will still be coming back for phase 3.

The actual costs of our project are lower than our budgeted costs which is a great sign since our club does not make a profit! We have a budgeted cost of $613 and actual costs of $444. The lower budget is great for the development of the club. We do not make any money of our members and speakers.

What was the success criteria listed in the project scope statement?

- On the MOV statement we declared that this project will be successful if it increases memberships by 60% next semester and if it reduces the time of decision making for iMSA offices. If we have a strong database with information and feedback from our members we as iMSA officer can make better decision for our club. Even though we are a non-profit we worry about what kind of services to offer our members, so I believe that the data we gather from the website will be very useful.

- In addition to the MOV we set two critical success factors as part of our scope management:
    - Create documentation that will be useful to future iMSA officers when they make future website updates (Phase 1 & 3).

    - Either fulfill or set plans to fulfill a minimum of six Phase 2 deliverables before February 1st, 2018.

Our 1st critical success factor is nearly fulfilled and will be as soon as our new officers are chosen. Our second critical success factor is now the focus of our work in the coming weeks.

Reflect on whether or not you met the project success criteria

- As mentioned, one of our Critical Success factors has been fulfilled. The other Critical Success factor and our MOV goal are still being work towards as of now, 12/17/2017.

- One of the biggest accomplishments of this project so far was creating a solid infrastructure for iMSA, now we have documentation that will be used as a template for future references.
- Another accomplishment is the new appearance of the website. The new iMSA website looks more appealing to out target which are the students here in SF, it looks modern and user friendly.

What were the main lessons your team learned from this project?

- Weston: I would speak of the word "experience" more than "learning." I had a new experience of leading a talented team in the construction of professional documents using new and great templates. It is a new experience for me, personally, as I would say that my social and management skills now are the cumulation of years of other experiences and training. I was not always this good. It felt great to make a quality product and to earn the respect and deference of such fine people. It is quite a special thing to be leader of this team.

- Olga: Learned the new technology and tools. How to choose the best technology that available on the market and do not require the significant investments and at the same time will be fit to the project, help to achieve the project goals and provide superior value and quality to iMSA members and officers with a focus on outstanding service.

- Lucero: This project taught me the importance of having "quantify goals", we assigned each goal a measurable unit so we could track the process of the whole project. This way of tracking was very useful, we were able to adjust and change resources accordingly to the progress of each goal. I also learned all the steps that are necessary to create a successful IT project, and how to allocate resources to each task. I enjoyed every step of the process and I was lucky enough to have a great team, everyone was very engaged in this project.

- Thinh: I would say that teamwork is what I learned by working with my teammates in the project. We were able to successfully communicate and meet up when necessary. We all held accountable and kept each other up to date on what needed to be done and reminded each other of deadlines. We were able to split up the work throughout the semester and everyone was responsible and contributed to the success of the project.

- Alex: I learned that any kind of project will benefit from project management aspects. Budget is a very important part of any kind of project however we were able to implement these project management tools into a project for a non profit club.

Scheduling and task allocation were very beneficial for our project and we will be applying it all of it next semester.

Describe one example of what went right on this project.

- Weston: Loads went right and that all draws to how the project was constructed: making the workload of a class assignment the same work that would benefit a student organization that our team had leadership positions in. Making our project in this way brought greater benefit to both our class work and organization work than would have otherwise been possible. iMSA benefits from having a dedicated workforce that worked on an enforced schedule for free. Our classwork benefits from us putting in extra effort into our work because it is actually meaningful to iMSA and future iMSA officers.

- Olga: We were always on time with the completion of tasks and deliverables according to the schedule of project.

- Lucero: I think the main thing that went right is that now we have a solid structure for our iMSA club. As an officer for iMSA I'm very happy that this project was completely dedicated to making a better and more organized club for our members. I truly believe that the documents we create will help us and the future officer to know how to prepare projects and assign resources. Some of the documents also describe the roles of each member in the organization, it is so important to know everyone's responsibilities and duties in the Club.

- Thinh: We were able to take advantage of the current iMSA website structure and build it up to the new website with advanced functions.

- Alex: Our group had a very strict infrastructure when it came to providing content and communication. Although the structure was strict, we were able to make accommodations and be flexible with one another because we were always on time and prepared.

Describe one example of what went wrong on this project.

- Weston: When my mother underwent surgery, I was thrown out of equilibrium on everything. My sleep schedule was off, some of my obligations slipped through the cracks of my attention, and I was more irritable. As team leader, this made me sloppier than usual for about two weeks and resulted in a more intense work session for my whole team when working on WBS Report.

  Additionally, I wouldn't say that this is an issue that went wrong but I would say that my team and I would have developed more experience in the management of money if our project had required costs, such as team member salaries and task costs.

- Olga: We experienced the small lack of communication with Roy Anguiano Director of IT in iMSA student organization. He is not part of IT project management team, but he is the most knowledgeable colleague in the matter of iMSA website infrastructure and possible technological updates. It the beginning of this project we created the list of possible new technology and tools that we consider will benefit to the project and based on this list we planned technology budget. After the meeting with Roy and getting from him the full picture of IT infrastructure as well as the list of suggestions we realized that we need to adjust the list of technology. Our issue was that the budget for technology have already announced to stakeholders. Fortunately, the changes were not significantly and we managed to find the alternatives with the same price.

- Lucero: Every step of the project went smoothly, the only thing that I might argue is that since we are a non-profit organization we didn't have an extensive report on the cost, I don't think this is something that "went wrong" but I definitely didn't think about the cost report when suggesting the iMSA website as a project. One other thing is that at some of in the middle of the semester everyone got extremely busy and couldn't meet up but we were able to do conference calls and work it all out. Great experience.

- Thinh: Nothing went wrong. However, we had projects for other classes that was due on the same week, we sometime did not get enough sleep to complete the project.

- <u>Alex:</u> The only thing I could say that would remotely relate to "going wrong" would be our attendance for some of our group meetings. However we were all very flexible and our attendance did not affect our schedule or quality.

What will you do differently on the next project based on your experience working on this project?

- <u>Weston:</u> Utilize the forms and templates I used in this course. I will take a lot of inspiration from what I did this semester. I'm sure that this will be a different and impressive approach in the eyes of those who I am performing a project for.

- <u>Olga:</u> It is necessary to invite for the initial project meeting the IT infrastructure experts who currently responsible for the functionality of system which we are planning to change, modify, update, etc. It will help to get full data from the beginning of the project and avoid in the future changes in the list of technology and budget.

- <u>Lucero:</u> I will definitely use all the tools we learned in this class for example, the NPV/ROI analysis, the scoring model, EAC analysis, Risk identification and etc. Something that I feel is extremely useful is knowing how to create all the documents for a project, this I believe will be major key in my career because i plan to pursue the IT project manager title in the future.

- <u>Thinh:</u> With the experience acquired from this project, I will be able to determine and complete tasks involving microsoft project greater and faster in the next project.

- <u>Alex:</u> I will plan to emphasize budgets and expenses. Our project did not have many expenses and I would like to get more experience with budgeting.

Signatures of Approval

Team 6 Member Signatures of Approval

Weston Davis, Lucero Dávalos , Olga Smirnova, Thinh Tang, & Alexander Tam