

Husky Air Project

**INFO 461-001: Information Systems Planning &
Project Management**

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Brief Description:

As a member of this team, I completed a fair share of work during the duration of this project. I would usually read the textbook a few days in advance to get a better understanding of the project deliverables and elaborate on specific details. After reading the chapter, I would print additional instructions in the textbook as well as the instructions the Professor provided us. For each project deliverable I would write small notes on the side of my paper to help explain to my team members what needed to be done.

During the duration of the project, I would be the one to write most of the explanations or why we chose a specific method because I had read the textbook before hand. I would always refer back my textbook to go into more detail and provide valid evidence of why my choice would be the best.

This project required about 3-4 Work Breakdown Structures, of which I helped on one of them. The one I provided aid in was the Earned Value Analysis WBS. For all the other WBS needed for this project, I provided some insight, but my team members mostly completed those.

Furthermore, for every table or chart we had to create, I would provide the group with the explanation or description. I would refer to the notes I had taken and finish those charts in no time. Overall, my team and I had divided the work equally, where no one felt overwhelmed with work , after all, we all understand the life of a college student.

Executive Summary:

The information collected on the proposed Husky Air project suggests that the company can move forward with the proposed plan. According to our work breakdown structure, we will begin the project on May 23, and it will last roughly 32 business days. The project's duration could be extended depending on if we outsource to BugBuster. Developing the “to-be” system will begin along with project implementation.

As of now, we have our baseline plan laid out shown by the Work Breakdown Structure. The Project Manager has received the schedule and budget for the project, as well as approval from our stakeholders to proceed with the project. With the project approved, we can begin the first steps of system implementation. The Work Breakdown Structure shows that we still have a lot of work to complete in the 32 days before successfully completing the project. We have recruited five employees to work on this project from networking websites such as indeed.com.

My suggested method for implementation is Direct Cutover. Fifty days is plenty of time for our expert developers to fix any bugs and perfect the system. The new system will effectively replace the old system and meet all of our requirements. The Phased approach would be effective, but not efficient. This approach will definitely take more time than Direct Cutover and Parallel would, and with the outsourcing to BugBuster, we do not have time to spare if we want to keep our stakeholders happy. Parallel would certainly be too time consuming with employees entering old data into the new system, there is also a chance for error in inserting the old data.

One thing we do not know about this proposed system is which software will run the best on our new system, whether it is Windows, Linux, or another one. My suggestion is to add another testing phase into the project to assess which software will run the best. The Project Manager can divide the work amongst employees,

and gather enough data to make an informed decision. This will not take much time at all, maybe 1 business day or 2. Overall, the new system will improve Husky Air business functions, and in turn please our stakeholders. The project should be approved.

Case Study and System Request :

HUSKY AIR—PILOT ANGELS Background

Husky Air opened for business in January 2008 when L. T. Scully and several other investors pooled their life savings and secured a rather large loan from a Chicago bank.

Located at DeKalb Taylor Municipal Airport (DKB) in DeKalb, Illinois, Husky Air is a fixed base operator (FBO) facility that offers a full range of services to the growing demands for business and private aviation. Currently, the company has 23 employees composed of pilots, mechanics, and office staff.

As a FBO, Husky Air provides:

- Business jet, propjet, helicopter, and propeller aircraft charter
- Refueling
- Airframe, engine, propeller, and avionics maintenance
- Aircraft rental
- Flight instruction
- Pilot supplies

Although FBOs at other airports offer similar services, Husky Air has been receiving increased attention throughout the Midwest for its charter service, maintenance, and flight instruction.

Pilot Angels

In addition, Husky Air coordinates a charitable service called Pilot Angels. Working with hospitals, health-care agencies, and organ banks, Husky Air matches volunteer private pilots, willing to donate their time and aircraft, with needy people whose health-care problems require them to travel to receive diagnostic or treatment services. In addition, Pilot Angels also provides transportation for donor

organs, supplies, and medical personnel. All flights are free of charge, and the costs are paid for by the volunteer pilots who use their own aircraft.

The pilots who volunteered for the Pilot Angels program need no medical training and offer no medical assistance. The planes do not carry any medical equipment and do not have to accommodate any stretchers. Patients, however, must be medically stable and able to enter and exit the aircraft with little or no assistance. The Pilot Angels passengers typically travel to or from a hospital or clinic for diagnosis, surgery, or some other treatment. Travel companions, such as a relative, friend, or nurse, are common.

Currently, a pool of pilot volunteers is kept in a file folder. If a hospital or person with a medical or financial hardship contacts Husky Air, the name of the traveler, the destination, dates/times, and the number of travel companions are requested. Because of limited weight restrictions in small aircraft, the weights of the passengers and their luggage are needed as well.

After the initial information is provided, Husky Air contacts the volunteer pilots to determine their availability. Although a volunteer pilot may be willing and available for a Pilot Angels flight, the plane may not have the range or weight-carrying requirements. This may be an inefficient use of time since many pilots may have to be contacted until a pilot and suitable plane can be found.

The Team Charter

Congratulations! You have been hired as a consultant to work with a new client called Husky Air. The objective of your first assignment is to organize teams for completing the various Husky Air assignments. Your instructor will either assign you to a team or allow you to select your team.

Please provide a professional-looking document that includes the following:

- Team Name—You should come up with a name for your team to give yourselves an identity. This could be the name of your consulting firm.

- **Team Members**—Please list the names of your team members and their phone numbers and email addresses. This will provide means for contacting each team member later on.

- **Skills and Knowledge Inventory**—List the specific knowledge and/or skills each team member can contribute to the project. This may include specific technical knowledge, communication skills, or leadership skills.

- **Roles and Responsibilities**—Based upon your team's skills inventory, define roles and responsibilities for each member of your team. Leadership roles can be defined for the entire project or can be shared or even rotated.

- **Agreed Upon Meeting Times**—You and your team should compare schedules so that you can

agree on times your group can meet to work on the case assignments. This may help you to discover any conflicts and reevaluate whether you should be a team.

- **Agreed Upon Meeting Location**—Also, decide where you will meet. This help you discover any issues beforehand if team members have to commute.

- **Team Communication**—Decide how the members of your team will communicate and share information. Will you meet face to face? Or will you take advantage of a software collaboration tool or other available technology to help reduce the dependency on same place/same time meetings. Where will documents be stored? Be specific as to what resources or technology your team will need to work effectively.

- **Team Rules and Expectations**—You probably have some experience working on a team before. As a team, share some of those experiences and discuss whether those experiences were positive or negative. Based upon your discussion define a:

- **Team goal**—What do you want to achieve as a team? For example, this could be a specific grade for the course or minimum grade for the case assignments you will turn in over the semester.

- **Set of team values**—You may want to start by developing a list of values that you and your team members feel are important. Based on that list, develop a statement or itemized list that summarizes those values.

- A code of ethics—A project team has a responsibility to itself and to its client or sponsor. Based on your team values, create a statement or itemized list that summarizes a code of ethics to guide your team's ethical behavior.
- Set of rules and expectations—What are the rules for being on the team? For example, how will the team make decisions? How will the team resolve conflicts? What happens if someone misses a meeting? Two meetings? Three? How will the team deal with someone who does not contribute equally? Each member of your team should agree to these rules. Do not take this lightly. You may also want to discuss and document how the team may change its charter if needed later on.
- Signatures—Each member of your team should sign the team charter. This will indicate that each member has read, but more importantly understands, and agrees to the rules and expectations of the team.

The Project Description(Given)

Husky Air would like to have a computer-based system to keep track of all its Pilot Angels volunteers. Basic information about the pilots may include their name, address, phone number, and so forth, as well as their total hours, certifications, and ratings. Moreover, specific information about a volunteer's aircraft would be useful. Such information should include the type of plane, aircraft identification number (called the N number), whether single or multi-engine, and its capacity for carrying passengers and cargo. Some pilots own more than one plane.

Husky Air also wants to know more about the people, hospitals, clinics, and organ banks that request the Pilot Angels service. In addition, they also would like basic information about the patients, their passengers, and specific needs to help match volunteers with the request for transport. Finally, Husky Air wants a list of all the Pilot Angels flights in order to recognize specific volunteers for their contributions. This would include:

- The pilot who flew the flight
- The passengers onboard
- The plane that was used
- The total time of the flight
- The distance and destination of the flight
- The date and time of the flight
- The total fuel used

Team Charter:

Bios

Arjun-

My name is Arjun Bansal and I am currently a senior at Virginia Commonwealth University studying Information Systems. When I was a freshman I had my major as Undeclared because I was not sure what I wanted to do for the rest of my life. After taking a few business classes and doing a couple Internships dealing with computers I decided that Information Systems was a perfect match. Last summer I interned at the Conference of State Bank Supervisors and my title was Information Systems Security Compliance Intern, this summer I worked for Amazon Web Services as a Site Manager and Recruiter. I am really hoping that all these classes will prep me up well for the “real world”.

Mitch-

My name is Mitch Mumma, I'm from Centreville in NOVA. I'm currently a senior studying Information Systems. I realized this is what I wanted to do over the summer at my internship in Reston. I saw the inner workings of the Intelligence company I was interning for and was very interested in the Systems Analysis side and how everything needs to fit a certain way to function properly. In today's technological world, that is the most important aspect of a business; all systems need to be functioning properly for the company to operate. Once I finish college, I plan on starting my own business. I hope to learn 'real world' application of systems analysis so I can apply it to my business plan and further perfect it. I'd consider myself a smart guy, I know a lot of things. One quality I have that a lot of people like about me is my willingness to admit when I am wrong and ask to be corrected. A lot of people today too scared to admit when they are wrong and that only prevents you from growing as a person. Overall I am excited for the semester and working with my group on the future projects and hopefully seeing the bigger picture.

Mo- My name is Mo Mudather. I was born in Sudan but I have been in Northern VA since I was 2 years old. I am a senior Information Systems major with minors in economics and math. I started my time at VCU as an undeclared student but I soon switched to electrical engineering. After a couple semesters of physics and linear algebra I decide to switch my major. I have always been passionate about technology so I thought engineering would be the best fit for me. Since switching to IS I have realized this is what I am truly passionate about. This summer I

interned at the Virginia State Corporation Commission, mainly working on a hardware refresh program and basic issue troubleshooting.

Andy- My name is Andy Singh and I am currently a senior at VCU pursuing a bachelor's degree in information systems. During my freshman year, I attended Old Dominion University studying computer engineering but soon decided to change my major when applying to VCU because I realized I wasn't interested in all the science aspects of engineering but still wanted to surround myself with a computer and programming background. Therefore, I decided to change to information systems because I was intrigued with learning about business and I could utilize certain skills that I wanted to still attain such as programming. As graduation looms around the corner I have narrowed in on a specific element of IS that I want to pursue a career in and that is either security or risk management. I came to this conclusion because I enjoy the thought of being an important element of everyday business activity as well as ensuring that information assets are secure.

Team Operating Principle:

The TOPS Document is designed for you to establish/reestablish norms with your team in terms of how you would like to work together. Taking the time to understand what each person brings to the team is an important part of building a great team. Even if you have been working together previously, this exercise can be valuable when teams are changing or when new team members join the team. Knowing what can create challenges for each of us also helps individuals on the team support one another and minimize the creation of unintentional problems.

Team Member	Strengths	*Hot Buttons*	Reactions under stress	How you can help me when my hot buttons are pushed
Mitch	Organized Timely Team Player Dependable	Members not pulling their weight	Overwhelming, will not know where to start on a new project Angry Indecisive	White Monster
Arjun	Good with setting up meetings Focused on assignment Great Time Management	Not completing assignments on timely manner	I would get angry and stressed. More pressure on my and the other group members' shoulders.	Discuss how we are going to fix the problem
Mo	Understanding and open to new ideas. Time manager, communicates easily, organized	Group members slacking and taking credit for everyone else hard work.	Withdrawal / anger	Discuss everything and hash thing out in a timely matter

Team Mission Statement

In one sentence, what do you hope to accomplish as a team (don't worry about perfection here, just the main idea)?

As a team, we hope to complete all the assignments fully and on time. Additionally our work will be done diligently and as a team. No team members should be 'in the dark' about what other members are doing.

As a team, I want all of us to understand the material confidently, just for some exams, but for the "real world" and how it will prepare us for that.

Team Core Values

What can you agree about the most important values you share in building success as a team? Quickly brainstorm and settle in on the top 3 – 5 values with a concrete example of what that would look like for the team when the team is in alignment with these values and when they are

Value	Behavioral Example and Counterexample (Please be specific)
Communication	Members will be communicating amongst each other about the work, asking for help when necessary and assisting other members if they get stuck. Everyone will know what their portion of work is and communicate if they need any help. -- (counter) -- A member isn't replying in the group chat, or a member gets stuck on something and instead of asking for help, gets frustrated and quits without telling anyone.
Time Management	For any group assignments I would like for the work to do be done a few days before so we can review it and fix any minor or major issues. Completing a project on the last day is too stressful and often more errors occur.
Accountability	Making sure everyone does their work and contributes equally towards the group. Do not want to see anyone sitting back while others do all the work.

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Communication Need	Agreed Mode of Communication	Turn Around Time (if applicable)
General Logistics & Coordination	phone GC	asap
Quick Question	phone GC	asap
Urgent Matter	phone GC	asap
Personal Issue/Concern	email	
Project Planning	email, in person	4-6 hours
Other		

ACCESSIBILITY AND ON-CALL

What hours and days during the week do we want to agree to be generally accessible?

All days. Quick questions and concerns can be sent in the groupchat and other members will help when they get the chance. We will also be meeting at least once a week, possibly more depending on the workload. Our schedules can get slightly hectic with other classes and work, so there is no concrete meeting time set up yet; but will be agreeing to meet weekly at an agreed upon time.

NORMAL TURNAROUND TIME

What expectations should we have in terms of the frequency of checking e-mail and voicemail during the work week? On weekends and evenings?

WE HAVE OUR PHONES ON US AT ALL TIMES SO THAT SHOULDN'T BE A PROBLEM. AS SENIORS, WE CHECK OUR EMAILS AT LEAST ONCE AN HOUR, AND HAVE THEM LINKED TO OUR DEVICES. THE LATEST TURNAROUND TIME FOR EMAIL IS 6 HOURS.

TEAM MEETINGS

How often should we meet as a team- both face to face and virtually?

THE TEAM SHOULD MEET AT LEAST ONCE A WEEK. WE WILL BE COMMUNICATING VIA DEVICES WHEN IT IS NECESSARY, AND TO SIMPLY CHECK UP ON THE STATUS OF ANOTHER MEMBERS WORK AND IF THEY NEED ANY HELP.

ORGANIZING AND GETTING THE WORK DONE:*

WHAT PROCESS STEPS WILL THE TEAM FOLLOW:	PROCESS STEPS:
TO DECIDE ON INITIAL ROLES AND RESPONSIBILITIES TO TACKLE THE WORK? (E.G. PROJECT MANAGER, TASK DIVISION AND/OR TIMEFRAME EXPECTATIONS)	MEET UP AND FIGURE OUT WHAT EACH MEMBER FEELS COMFORTABLE WITH DOING AND ASSIGN ACCORDINGLY. WE WILL COMPLETE OUR WORK THE DAY BEFORE SO WE CAN HAVE SOME TIME TO LOOK OVER THE COMPLETED PROJECT AS A WHOLE AND MAKE CHANGES IF NECESSARY BEFORE SUBMISSION. TASKS WILL BE CLEARLY DIVIDED AMONGST MEMBERS.
TO DEVELOP AND FINALIZE TEAM DELIVERABLES (E.G. INITIAL WORK, INTEGRATION OF WORK, REVIEW AND REFINEMENT OF WORK, DECLARATION OF WORK COMPLETION COMPLETION OF WORK)	COMMUNICATE THROUGHOUT THE WHOLE PROCESS TO MAKE SURE EVERYONE IS ON THE SAME PAGE. ALSO CHECKING UP ON EACH OTHER WILL CONSTANTLY REMINDING EACH OTHER OF WHAT IS EXPECTED. ALSO WE WILL MEET UP AS NEEDED TO COMPLETE TASKS TOGETHER.

IF A TEAM MEMBER IS NOT CONTRIBUTING AS EXPECTED (LATE DELIVERABLES, LATE OR NOT ATTENDING MEETINGS, DISENGAGED FROM GROUP ETC.)	DISCUSS ISSUE AS A TEAM FIRST AND MAKE SURE THAT MEMBERS UNDERSTANDS THAT IT IS UNACCEPTABLE. IF THE ISSUE CONTINUES WE WILL BRING IT TO THE PROFESSOR'S ATTENTION. ONCE THE PROFESSOR KNOWS ABOUT THE ISSUE WE WILL ALLOW THE PROFESSOR TO STEP IN
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CONFLICT: NORMS AND CONFLICT RESOLUTION PROCESSES

Healthy conflict is normal and a sign of strength in teams. What norms will you establish for engaging in healthy conflict? There are several areas where disagreement is a natural part of the team process For example, how do you want to hold a conversation when you: a) disagree with a teammate's view on what to do? Or b) disagree with other(s) on roles and responsibilities or c) disagree on the processes for how the work gets done. What can you all agree are acceptable or unacceptable behaviors when you'd need to disagree and keep the values you established on page 3.

Team Conflict Norms When We Disagree About Ideas and Strategies, Roles and Responsibilities, and Processes TO Getting the Work Done

Acceptable Behavior (in face to face, phone and email situations)	Not Acceptable Behavior (in face to face, phone and email situations)
Listening to everyone's ideas and deciding which one is best for the particular assignment and respecting each other's ideas.	Not listening to other group members ideas and interrupting their views.

Agreeing on the division of work proposed in the initial project meeting, and group members feeling comfortable with their workload.	Work isn't divided evenly. One member wants to do all the work because they are OD. One member doesn't want to do any of their work.
Full party debate in event of disagreement between any number of members	Putting down or yelling at a group mate when discussing issues.

Process Steps to Be Followed:	Who is Accountable for Each Step
Speak with the person privately	Everyone
Speak to the group about the issue if step 1 is not successful	Everyone
Speak with the professor	Everyone

Business Case:

Description:

Husky Air opened their business in January of 2008 with many investors, aid, and expertise. The Husky Air business is located at DeKalb Taylor Municipal Airport (DKB) in Dekalb, Illinois. We are a relatively small company that has 23 employees which includes, pilots, mechanics, and office staff. We provide many resources like a various number of aircrafts, refueling, maintenance for aircrafts, aircraft rental, flight instruction, and supplies for the pilot.

Many other airports provide this service, however, we have a charitable service called Pilot Angels that works with hospitals, health-care agencies, and organ banks that take people with health care problems to receive diagnostics and treatment. Pilot Angels provides transportation for donor organs, supplies, and medical personnel free of charge.

Husky Air has an abundant amount of pilot volunteers that are kept in a file folder. We need a new information system implemented in our offices to keep track of all the Pilot Angel volunteers. This “to-be” system will help our company be more efficient and manage the pilots time better. This new system will not only help our volunteer pilots, but it will also record the people that require medical attention and basic information of the hospitals, clinics, and organ banks. Furthermore, this new information system will also keep a list of all the Pilot Angels flights in order to specify volunteers and their contributions such as, the pilot who flew the flight, passengers aboard, plane that was used, duration of the flight, distance and destination of the flight, the data and time of the flight, and the total fuel used.

Measurable Organizational Value :

The end result of this project should be to better implement and keep record of all the patient information, pilot information, destination information, details of the plane used, and supplies and equipment. This project will also bring value to the company and help justify our mission for Pilot Angels. This project will help Pilot Angels provide their charitable service for patients and medical services more efficiently and effectively. Pilot Angels business with benefit tremendously with this new information system with the sorted data; our pilots will be able to manage their time better which will allow our patients to be picked up and transported to their destination quickly.

Area of Impact	Improvement Area Value	Anticipated Measurables	Time Frame
Operational	<ul style="list-style-type: none"> - Improve effectiveness of transactions - Increase amount of working employees - Reduce client wait time - Improve information system 	<ul style="list-style-type: none"> Decrease transaction process by 30% Increase employees by 35% Decrease wait time by 50% Increase company organizational effectiveness by 100% 	<ul style="list-style-type: none"> Increase 5% over first year, achieve 30% by end of year 5 Increase by 7% annually over 5 years Decrease wait time by 10% annually over 5 years Establish information system by end of year 1
Financial	<ul style="list-style-type: none"> - Increase Investments Reduce costs of trip 	<ul style="list-style-type: none"> - Increase investments by \$175,000 - Cut maintenance and fuel costs by 15% 	<ul style="list-style-type: none"> - Over 5 years - Reduce by 15% over 5 years
Strategic	<ul style="list-style-type: none"> - Expand in different areas (Midwest) - Create a Brand 	<ul style="list-style-type: none"> - Expand to bordering states - Improve brand recognition by 20% 	<ul style="list-style-type: none"> - Establish 4 new locations over 7 years - Increase by 4% annually over 5 years

Customer	- Improve client satisfaction	- Increase customer satisfaction by 75%	- 75% gradually over the next 5 years
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Alternatives:

Alternative 1: Utilize current system and create organized filing cabinets and alphabetize the folders.

Alternative 2: Purchase and implement MySQL into our database management system.

Alternative 3: Develop and revolutionize an in-house system that will fully support Husky Air
Comparison:

TCO Table

Alternatives	Utilize Current System	MySQL implementation (Enterprise 5+ socket edition)	Develop in-house system
Hardware Costs	\$0	\$23,315	\$25,000
Software Costs	\$0	\$0	\$50,000
Training	Week long Training Boot camp: \$100 per hour	mySQL Online Bootcamp: \$100 per employee	Training seminars: \$450 per seminar
Support, Security, & Maintenance	\$1000 per year	\$20,000 per year	\$10,000 per year
TCO (5 yrs)	\$8,500	\$173,315	\$130,400

As you can see outlined above is the comparison of costs for our current system vs the alternatives we could essentially utilize. The current system that we are utilizing is the cheapest one at our disposal however it could be looked upon as being severely outdated, and difficult to manage. Also with the current system, we are facing the risk of files going missing or losing them since we do not have any digital back ups. My recommendation for going forward would be to develop and revolutionize an in-house database management system that will fully support

Husky Air's database needs. Developing a unique in-house system will provide husky air with a fully functioning management system that can be utilized in-house for years to come and serve as a new standard. It would also be truly cost efficient as compared to pursuing an outside server and software system such as MySQL. The main costs associated with the in-house system would be associated with buying custom hardware and software to suffice our needs at hand, as well as providing our employees with training seminars to familiarize them with the new implemented system. It would also provide an ease of use regarding internal communication within Husky Air. In addition to the advantages of using an in-house system, since we developed it we will not be spending a lot on maintenance and support since we will know the entire layout of our system and will be able to self diagnose and solve problems that arise. MySQL can be looked upon as a viable option due to it being accompanied with an abundant amount of support for the software. However it will not be as cost-efficient as developing our own system. MySQL is universal software utilized around the world, however the costs associated with it severely outweigh the advantages of using this system compared to creating our own.

Lastly, the main advantage of utilizing alternative 3 would be security. Since MySQL data is stored in a cloud it could be essentially hacked by criminals looking for confidential data. With our system the information would be burned into our physical servers which would be inaccessible by any outside entities as well as we will heighten our online security measures with various security and firewall softwares.

Comparison of Benefits

TBO	Direct Benefits + 1-5 Rating	Indirect Benefits + 1-5 Rating	Ongoing Benefits + 1-5 Rating
Increasing High-Value Work	Organizational Increase - 4 Work Quality Increase - 3 Quality of employee increase - 3	Employee satisfaction - 3	Quality of work - 5

Improving Accuracy & Efficiency	Decrease in pilot wait time - 3 Overall Business Increase - 4	Organizational Efficiency Increase - 5	Time saved - 5
Improving Decision Making	Ease of decision making - 4	Decision making confidence - 4	Quality of completed work - 4
Improving Customer Service	Increase in investments - 3	Customer Satisfaction - 5	Customer Word-of-Mouth - 3

Recommendation:

With all the researched and presented information, our team recommends Alternative 3 will be best fit for Pilot Angels. Although Alternative 1 is the cheapest decision, it will not meet our needs and requirements and will put our company in an unorganized dilemma again. Alternative 3 is slightly expensive but it will surely help run our business smoothly. With the new database all our information with patients, locations, pilots, and destinations will be secure in our “to-be system” and will be easily accessible by all employees. I am confident that the employee training for this new system will be no more than a week. The database will have all the information of the pilot such as their name, address, phone number, total hours, certifications, and ratings. Aircraft information will be stored properly such as the type of plane, identification number, single or multi-engine, and capacity. This database will also stored data on the people , hospitals, clients, and organ banks. Alternative 3 will keep every bit of confidential data secure and accessible nationwide to our employees. This new database will aid in editing, updating and searching. With this new system, employees will have more time; it is easier and takes less time

to manage information over a database, than search for the specific file and update/correct it. Also, with this option we will have the ability to change or edit features at ease. Furthermore, Alternative 3 will help our company's mission and bring value to this business.

Project Infrastructure:

Cost of Resources:

Resources Needed	Average Cost	Description
Employees	Total Average Cost \$47,800	
Mid/Senior Level Project Manager	\$60/hr (monthly \$9,600)	The P.M. will manage and oversee all the processes of the project and make sure it will be on schedule and budget.
Current Huskey Air Employee	Raise to \$32/hr (monthly \$5120)	Our current employee will help incorporate our business needs and value.
Programmer (2)	\$50/hr (monthly \$8000) per Total: \$16,000 monthly	They will create and develop the proper information system code.
Network Administrator	\$47/hr (monthly \$7520)	He/She will create and maintain Husky Air's computer networking.
Benefits	\$9,560	Employees get an additional 25% paid out in benefits.

Transportation	Total Average Cost \$4,000	
Rental Car	\$1500 Monthly	Large van to transport team and equipment to and from facility.
Air Plane Ticket	Ranging from \$300-\$600	We will fly our new hires in and out of the location for the project.
Facilities	Total Average Cost \$6,500	
Project Location	Monthly Lease of \$6,500	This will be where the Project Team will develop the Information System.

Technology:

Equipment	Specs	Prices
HP Pro x2 612 G2 Tablet (5)	<ul style="list-style-type: none"> ● Windows 10 Pro 64 ● 7th Generation Intel® Core™ m3 processor (m3-7Y30) ● 4 GB memory; 128 GB SSD storage ● 12" diagonal FHD WUXGA+ UWVA eDP touch display ● Intel® HD Graphics 615 	\$999.00 per person

<p>TP-LINK Archer CR700 IEEE 802.11ac Cable Modem/Wireless Router</p>	<ul style="list-style-type: none"> ● TP-LINK Archer CR700 IEEE 802.11ac Cable Modem/Wireless Router - 2.40 GHz ISM Band - 5 GHz UNII Band - 6 x Antenna(6 x Internal) - 1750 Mbit/s Wireless Speed - 4 x Network Port - USB - Gigabit Ethernet - VPN Supported - Desktop ● 2.40 GHz ISM Band - 5 GHz UNII Band - 6 x Antenna(6 x Internal) - 1750 Mbit/s Wireless Speed - 4 x Network Port - USB - Gigabit Ethernet - VPN Supported - Desktop 	<p>\$214.99</p>
<p>HP 1920-8G Switch</p>	<ul style="list-style-type: none"> ● HP 1920-8G Switch - Manageable - 3 Layer Supported - 1U High - Rack-mountable, Wall Mountable - Lifetime Limited Warranty ● Manageable - 3 Layer Supported - 1U High - Rack-mountable, Wall Mountable - Lifetime Limited Warranty 	<p>\$229</p>

Contract:

Our contract will be CPIF (Cost plus Incentive Fee). This contract will best fit this project because Husky Air will benefit from this in the long run, even though we have to reimburse the seller for the costs incurred. This contract is best because we will reward the project team with one thousand dollars extra if they are able to complete the project within a certain time period. We will want to finish this project in a months time, however, if the team is able to finish and train our employees earlier then they will be rewarded. The sooner the project is finished, the sooner Husky Air- Pilot Angels will be up and ready for business, which will benefit Husky Air.

Learning Cycle Iteration:

Our team has decided that our established team charter meets the requirements and is an appropriate approach for the goals we would like to achieve. Team M.A.M.A. has decided to create a Project Plan using Microsoft Project and manage and update all our activities through there. We will also use Microsoft Project to create our Action Plan and make sure we are completing our assignments on time. We will look through the syllabus and see what dates the next assignments are due and add them to our Microsoft Project document. At this time, all work is being divided equally among all group members and changes or points of concern are discussed during our weekly meetings.

Scope Management Plan :

The scope change process begins with the Project Manager and the stakeholder discussing on what changes and modifications need to be made. To formally request a change in the scope, a Scope Change Request Form must be filled out. The Project Manager will approve the scope change by measuring the cost/time analysis and risk analysis. Each request must be updated on the Change Request Form Log Sheet.

Date of request	Request ed #	Request ed by	Subject	Manage r Name	Respons e date	Approv al
	001					
	002					
	003					
	004					
	005					

SCOPE CHANGE REQUEST FORM

Request Name:

Request # (Log):001

Project Name:

Date Submitted:

Change Description:

Reason(s) for change:

Recommendations:

Is this an appeal:

Project Manager Approval

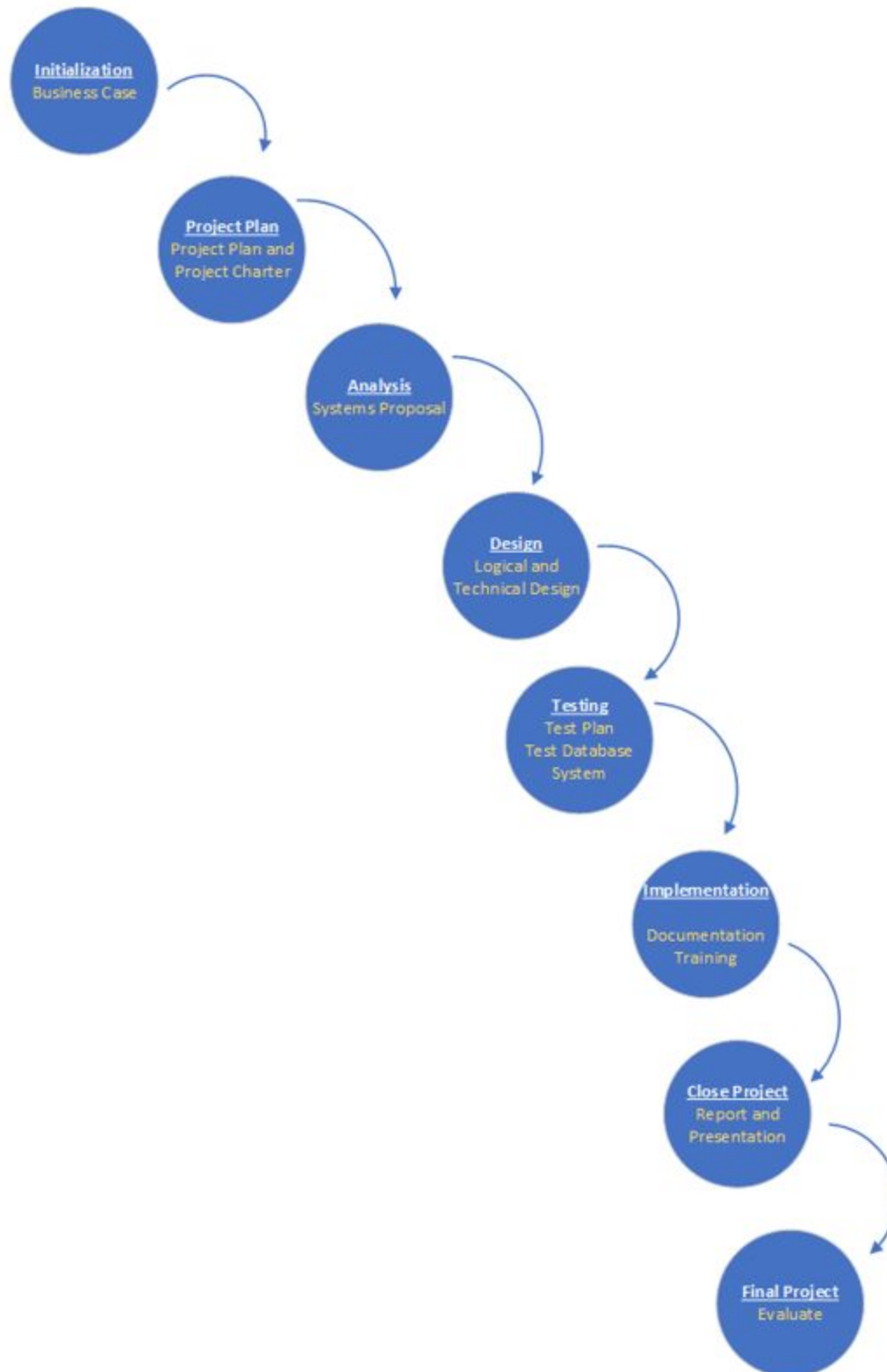
Signature

Titles

Date:

Comments:

Project Plan, Schedule and Budget:



Resource Assignments :

New Hires for Database System : The Team chosen for this project will help Husky Air-Pilot Angels with developing and implementing a database system to manage all necessary transactions and data.

Project Manager : The Project Manager will plan the entire project, starting with creating the Work Breakdown Structure and assigning each team member responsibilities. He/She will oversee the budget and schedule to make sure the database system is completed on time and within budget. The Project Manager will communicate between the project sponsor and the team members.

Network Administrator :The network administrator will manage the network infrastructure for the “to be” system. This individual will manage and update machinery and servers in the work environment. He/She will have to make sure the data and software is implemented correctly and there are no security breaches.

Current Husky Air Employee : The current Husky Air employee will help the Project Manager in achieving the MOV and meeting the company's vision for the project, as well as expanding on Husky Air’s mission.

Programmers : The two programmers hired will be responsible for coding and updating the database system, ensuring all users whether it is pilots, staff members or patients can use the system efficiently.

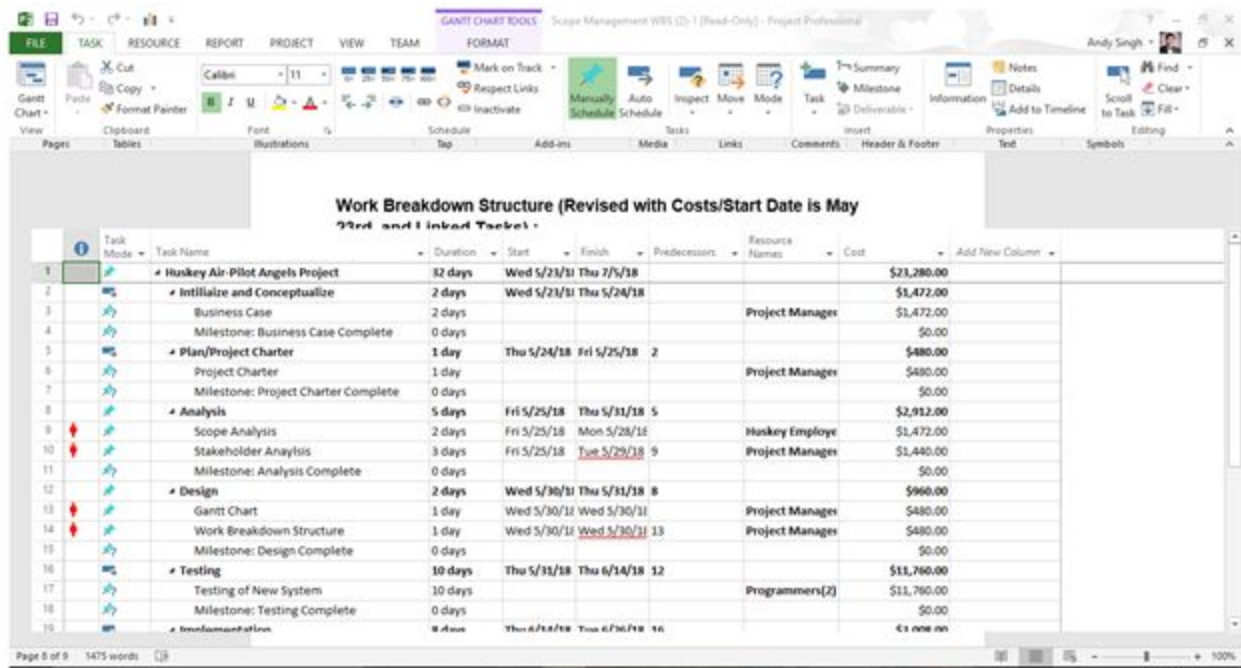
Cost for Resources :

Based on IndeedJobs.com (hourly wage)

Resource	Salary	Cost per Day
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Project Manager	\$60	\$480
Network Administrator	\$47	\$376
Husky Air Employee	\$32	\$256
Programmer (2)	\$50 per programmer	\$800 (total)

Work Breakdown Structure (Revised with Costs/Start Date is May 23rd, and Linked Tasks) :



Work Breakdown Structure (Revised with Costs/Start Date is May 23rd and Linked Tasks)

Task ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost
1	Husky Air-Pilot Angels Project	32 days	Wed 5/23/18	Thu 7/5/18			\$21,280.00
2	Initiaize and Conceptualize	2 days	Wed 5/23/18	Thu 5/24/18			\$1,472.00
3	Business Case	2 days				Project Manager	\$1,472.00
4	Milestone: Business Case Complete	0 days					\$0.00
5	Plan/Project Charter	1 day	Thu 5/24/18	Fri 5/25/18	2		\$480.00
6	Project Charter	1 day				Project Manager	\$480.00
7	Milestone: Project Charter Complete	0 days					\$0.00
8	Analysis	5 days	Fri 5/25/18	Thu 5/31/18	5		\$2,912.00
9	Scope Analysis	2 days	Fri 5/25/18	Mon 5/28/18		Husky Employee	\$1,472.00
10	Stakeholder Analysis	3 days	Fri 5/25/18	Tue 5/29/18	9	Project Manager	\$1,440.00
11	Milestone: Analysis Complete	0 days					\$0.00
12	Design	2 days	Wed 5/30/18	Thu 5/31/18	8		\$960.00
13	Gantt Chart	1 day	Wed 5/30/18	Wed 5/30/18		Project Manager	\$480.00
14	Work Breakdown Structure	1 day	Wed 5/30/18	Wed 5/30/18	13	Project Manager	\$480.00
15	Milestone: Design Complete	0 days					\$0.00
16	Testing	10 days	Thu 5/31/18	Thu 6/14/18	12		\$11,760.00
17	Testing of New System	10 days				Programmers[2]	\$11,760.00
18	Milestone: Testing Complete	0 days					\$0.00
19	Implementation	8 days	Thu 6/14/18	Tue 6/19/18	16		\$1,120.00

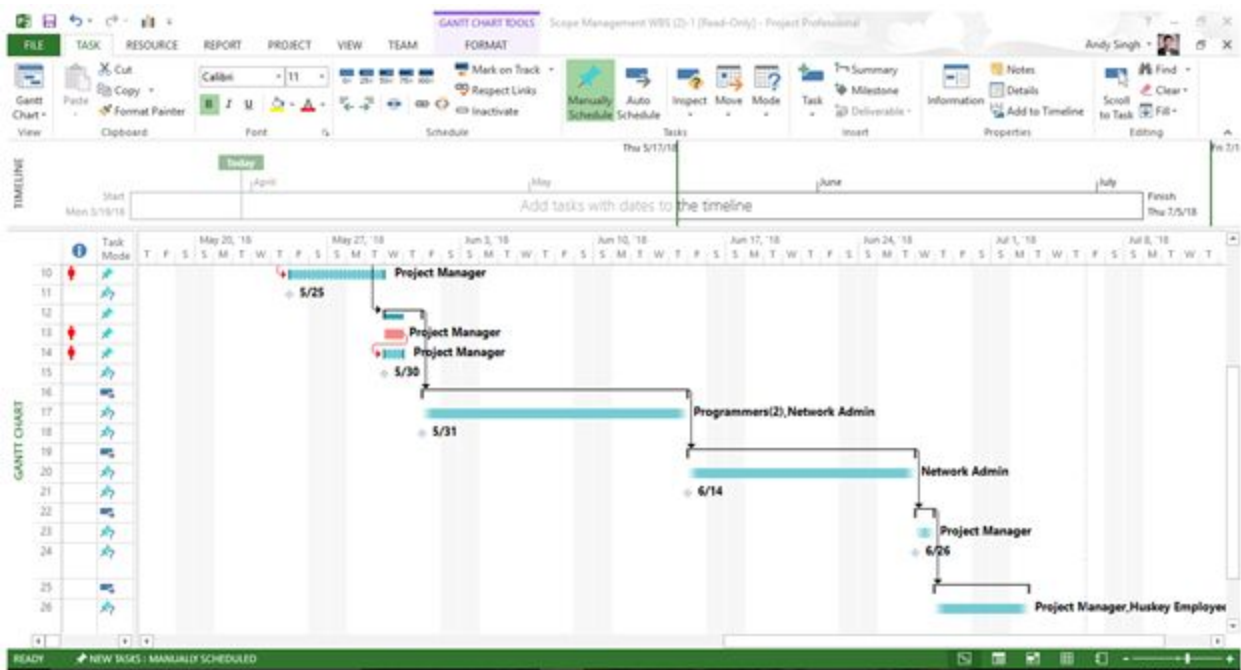
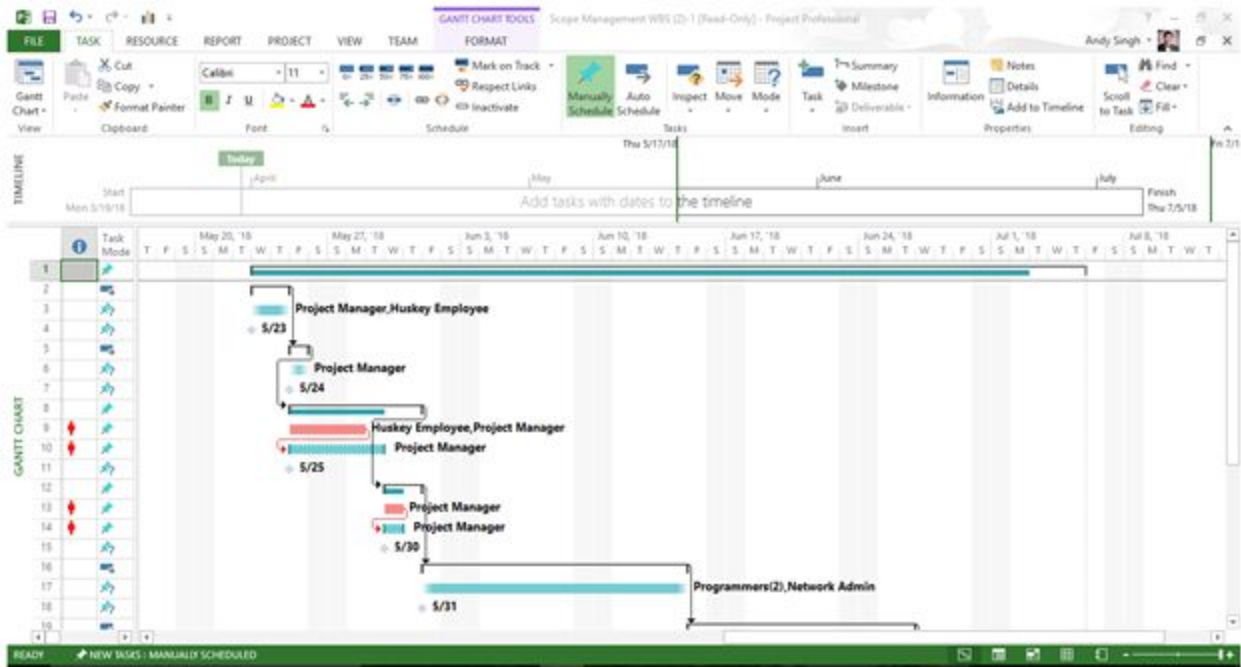
Scope Management WBS (2) - 1 (Read-Only) - Project Professional

Andy Singh

Work Breakdown Structure (Revised with Costs/Start Date is May 22nd and Linked Task)

Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost	Add New Column
19	Implementation	8 days	Thu 6/14/18	Tue 6/26/18	16		\$1,008.00	
20	Implement system throughout company	8 days				Network Admin	\$1,008.00	
21	Milestone: Implementation Complete	0 days					\$0.00	
22	Close Project	1 day	Tue 6/26/18	Wed 6/27/18	19		\$480.00	
23	Report/Presentation	1 day				Project Manager	\$480.00	
24	Milestone: Presentation complete/Project closed	0 days					\$0.00	
25	Evaluation	3 days	Wed 6/27/18	Mon 7/2/18	22		\$2,208.00	
26	Evaluate project and document in portfolio	3 days				Project Manager	\$2,208.00	
27	Milestone: Evaluation Complete	0 days					\$0.00	
28	Milestone: Project Complete	0 days					\$0.00	

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Written Report :

After all the documents have been reviewed and the Project Manager and his team have approval from the stakeholders, we would like to begin the Husky Air-Pilot Angels Project on Wednesday, May 23rd, 2018. The Project Manager has gathered his data and evaluated every situation, and believes this project should be a duration of 32 business days (Monday -Friday). Our “to-be” system should be operational on Tuesday, July 5th, 2018.

Our Husky Air-Pilot Angels Project has several critical paths identified by our Project Manager. The Project Manager of this particular project must be able to monitor, identify and manage the critical paths because there could be a possibility it could change. If there is any change in duration of the activities/tasks on the critical path it will affect the project schedule. Our Project Manager must be an expert with the critical path and the critical path analysis, where he/she can crash or expedite the project by adding resources to an activity on the critical path to shorten the duration. It is important the Project Manager identifies the critical path and if necessary could use fast tracking (parallel) to shorten the project schedule. If any unplanned event happens where the project might not be delivered on time, the Project Manager will immediately inform the stakeholder(s) of the inconvenience. We do not want to surprise our stakeholder(s) on July 3rd when our Project should be completed, but due to unplanned circumstances it will cost them more money and time.

Using Microsoft Project, the total project baseline cost of the project is \$23,280.00.

This particular project will not have any over allocated resources because there are not multiple projects in company, nor is software being used to allocate tasks to resources. Our Project Manager has been tasked with reasonable expectations that can be delivered.

Risk Management Plan :

Project Phases	Initialize and Conceptualize	Project Plan/Charter	Execution and Control	Closing	Evaluation
Risk	Change in the Budget	Change in the Scope of the Project	Problems with Transferring/ Conversion	Client Project Discrepancies	Unexpected Maintenance/ Repairs Required
Type of Risk	Known-Unknown	Known-Unknown	Known-Unknown	Known-Unknown	Unknown-Unknown
The Source of the Risk	Internal	Internal	Internal	Internal	External
Resources	Organization	People (Team) and Process	Technology	People, Software, Technology, Processes	Natural Disaster
Triple Constraint	Budget	Scope	Schedule	Quality/Budget	Schedule/Budget

Project Risk Report :

Roles	Risks	Strategy
Project Manager	The project manager will be in charge of dealing with the risk associated to changing the budget, and scope of the of the project.	One strategy to effectively manage these risks would be to create and implement a project communication plan, where he will be constantly communicating with the project stakeholders.
Project Team Members	The Project Team Members are responsible for managing the Execution and Control plan, which deals with transferring and implementing the new software properly.	A strategy to manage this risk is to create a Project Quality Plan and communicate with the stakeholder to verify all the needs are met for this project.
Risk Owner(s)	The risk owner will manage the risk of Evaluation, if a natural disaster were to happen.	A strategy plan to managing this risk is to develop a Disaster Recovery Plan.
Stakeholders of the Project	The Stakeholders of the project will oversee the risks the arise from changes in budget, changes in scope, and Client Project Discrepancies.	The method of regulating these risks is to maintain and implement the Project Communication Plan.

Project Summary Report:

We had to make a few changes in our original plan, as we must reduce the project schedule by ten percent and our project budget by twenty percent. We had many options on how to reduce these areas, but the one that seemed to give us the least risk was to reduce our Testing from ten days to six days. By doing this, we are cutting our budget cost to \$4700, which is what we needed to get our budget down by twenty percent. This will not create a serious risk in our project because we still have plenty of time to make sure our “to be” system is working efficiently and effectively. Ten days for testing seemed like a bit much, so we decided that reducing this task would give us the least amount of risk.

Earned Value Analysis and Quality Management Plan:

Description:

Our team assigned for this project will guarantee our product meets our stakeholders standards and meets all the requirements. We had made quality plans, quality improvements and quality control. For this project our team follows the project management quality framework, which includes customer satisfaction, prevention, improving the process to improve the product, and fact-based management. Our primary goal is for complete customer satisfaction and that is done by making everyone on this team responsible of quality, not just our Project Manager.

Verification Activities :

When our team verifies the “to be” system we want to ensure that the software performs all the intended functions correctly and reliably. Verification focuses more on the process-related activities to ensure that all the stakeholder requirements have been met. Our verification process will have Technical Reviews, Business Reviews, and Management Reviews.

For Technical Review, the project team will make sure it meets the needs of the company. There will be walkthroughs and inspections to make sure there are no errors.

For the Business Review, we will ensure the functionality is exactly what was expected of this project.

For Managerial Review, the Project Manager and stakeholder will basically compare the projects actual progress against the project baseline plan. The stakeholder will verify that the project meets the scope, schedule, budget and quality objectives.

Validation Activities :

Validation will occur after our new system has been deployed and determines if the system or project deliverable meets the customer or clients expectations. We will test the performance, user interface/interactions, and software reliability. Testing the new software will be developers that have no personal stake in this project.

Software Test will verify how accurate the “to be” system conforms with the stakeholders requirements.

Functional Tests will find errors if any in the new software. Also, we will observe how the new system responds to the new environment.

Integration Tests will make sure the new software is efficient and effective. We will verify all the functions will be working properly.

System Tests will be done to ensure there are no errors, bugs, or viruses that could have been developed when the system was implemented. We will also guarantee the software will be user friendly to all Husky Air Employees.

At the end, we will complete another test and check the system to make sure it performs accurately and meets all the standards of the stakeholder.

Quality-Based Metrics

Type	Metric	Description
Process	<ul style="list-style-type: none">• Team member Defect• Implementation Defect	<ul style="list-style-type: none">• Human error is natural and sometimes cannot be prevented.• The number of defects found in transferring from one system to another.

Product	<ul style="list-style-type: none"> ● Employee Found Defects ● Customer Response Time 	<ul style="list-style-type: none"> ● The number of defects found by employees of Husky Air ● Average amount of time to get feedback from customer requests.
Project	<ul style="list-style-type: none"> ● Deliverable Completion Time ● Early Task Completion 	<ul style="list-style-type: none"> ● The amount of time is takes to complete a certain activity ● The amount of tasks completed ahead of planned schedule

Earned Value Analysis:

BugBusters Plan	Planned Value	Actual Cost	Percent Complete	Earned Value	Cost Variance	Schedule Variance	CPI	SPI	EAC
Phase 1: Test Planning									
Develop Unit Test Plan	\$480.00	\$720.00	100.00%	\$480.00	-240.00	0.00	0.88	1.00	\$16,262.86
Develop Integration Test Plan	\$840.00	\$960.00	100.00%	\$840.00	-120.00	0.00	1.00	1.00	\$14,200.00
Develop Acceptance Test Plan	\$560.00	\$560.00	100.00%	\$560.00	0.00	0.00	1.00	1.00	\$14,080.00
Payment 1:	\$1,880.00	\$2,240.00		\$1,880.00	-360.00	0.00	0.84	1.00	\$44,542.86
Phase 2:Unit Testing									
Code walkthrough with team	\$720.00	\$720.00	100.00%	\$720.00	0.00	0.00	0.63	1.00	\$22,096.00
Test Software Units	\$1,400.00	\$2,240.00	100.00%	\$1,400.00	-840.00	0.00	1.00	1.00	\$14,920.00
Identify programs that do not meet specifications	\$560.00	\$560.00	100.00%	\$560.00	0.00	0.00	0.57	1.00	\$24,220.00
Modify Code	\$960.00	\$1,680.00	100.00%	\$960.00	-720.00	0.00	0.97	1.00	\$15,210.00
Re-test Code	\$1,120.00	\$1,155.00	100.00%	\$1,120.00	-35.00	0.00	1.00	1.00	\$14,115.00
Verify Code meets Standards	\$480.00	\$480.00	100.00%	\$480.00	0.00	0.00	1.00	1.00	\$14,080.00
Payment 2:	\$5,240.00	\$6,835.00		\$5,240.00	-1,595.00		0.77	1.00	\$104,641.00
Phase 3: Integration Testing									
Test Integration of all Modules	\$960.00	\$990.00	100.00%	\$960.00	-30.00	0.00	1.00	0.75	\$14,110.00
Identify components that do not meet specifications	\$280.00	\$210.00	75.00%	\$210.00	0.00	-70.00	1.00	0.50	\$14,080.00
Modify Code	\$960.00	\$480.00	50.00%	\$480.00	0.00	-480.00	1.00	0.75	\$14,080.00
Re-Test Integration of Modules	\$1,120.00	\$840.00	75.00%	\$840.00	0.00	-280.00	1.00	0.80	\$14,080.00
Verify Component meets Standards	\$480.00	\$384.00	80.00%	\$384.00	0.00	-96.00	1.00	0.76	\$14,080.00
Payment 3:	\$3,800.00	\$2,904.00		\$2,874.00	-30.00	-926.00	0.99	0.76	\$70,430.00
Phase 4: Acceptance Testing									
Business Review with Client	\$280.00	\$0.00	0.00%	\$0.00	0.00	-280.00	0.00	0.00	
Identify units and components that do not meet specifications	\$560.00	\$0.00	0.00%	\$0.00	0.00	-560.00	0.00	0.00	
Modify Code	\$720.00	\$0.00	0.00%	\$0.00	0.00	-720.00	0.00	0.00	
Retest Units and Components	\$1,120.00	\$0.00	0.00%	\$0.00	0.00	-1,120.00	0.00	0.00	
Verify that system meets standards	\$480.00	\$0.00	0.00%	\$0.00	0.00	-480.00	0.00	0.00	
Payment 4:	\$3,160.00	\$0.00		\$0.00	0.00	-3,160.00	0.00	0.00	
Total Planned Value:	\$14,080.00								
Total Actual Cost:	\$11,979.00								
Total Earned Value:	\$9,994.00								

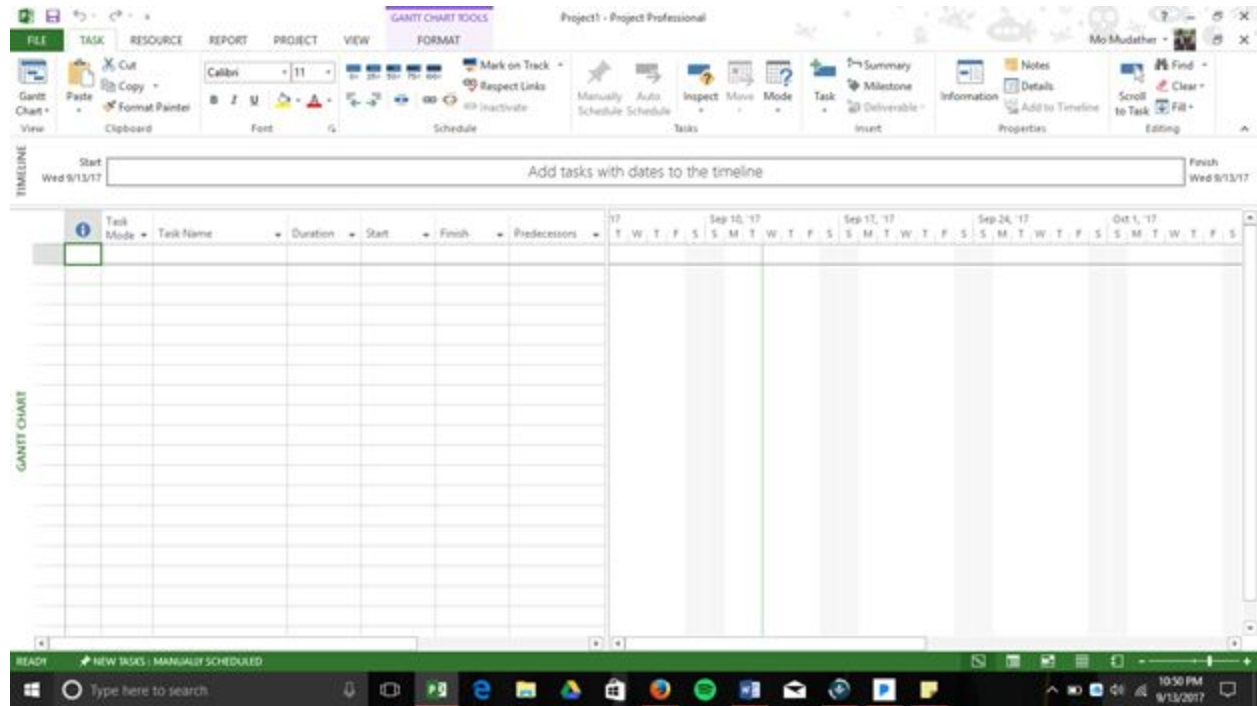
Earned Value Report:

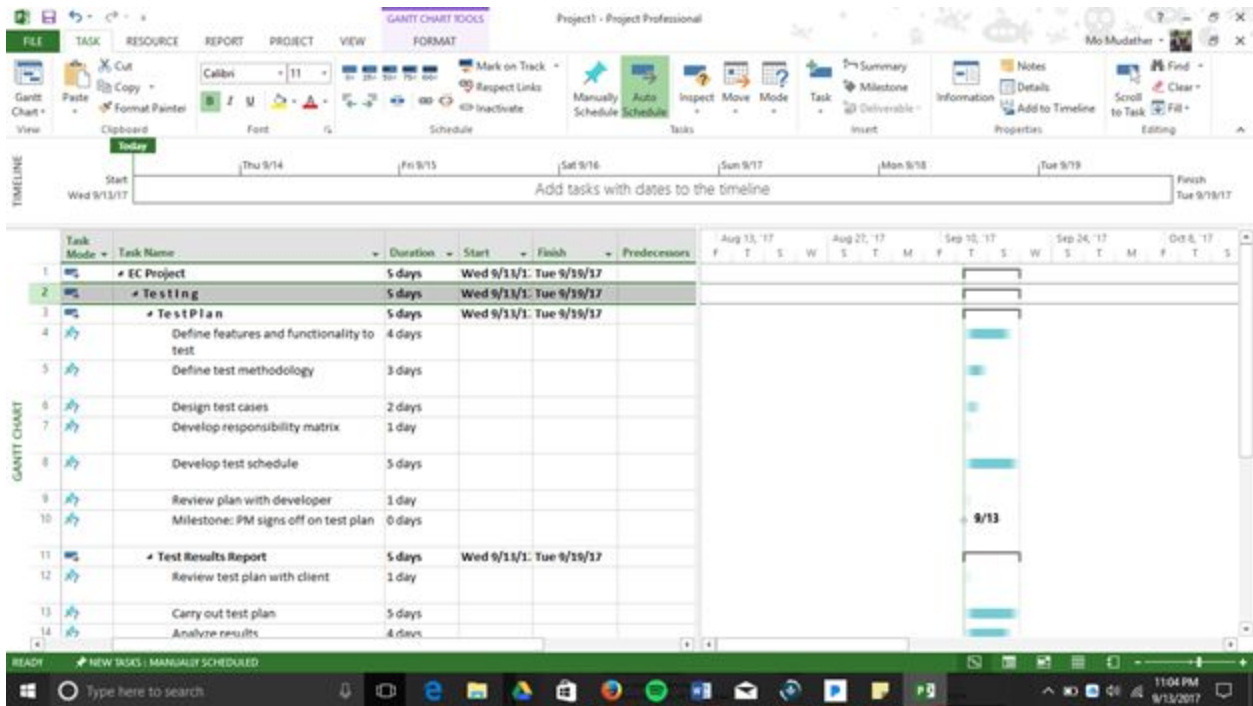
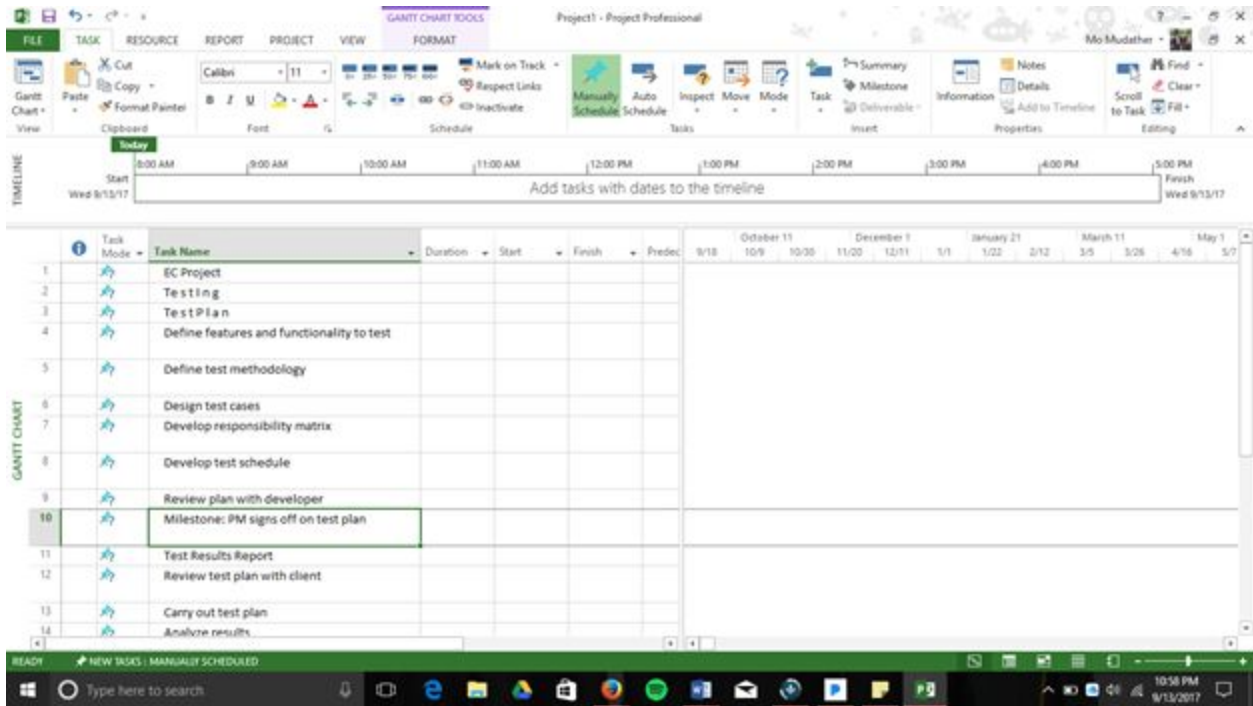
Our team might have to outsource the testing of the software system to *BugBusters* to save both time and money on this project. If we were to outsource on August 4th, 2016 it will take *BugBusters* fifty-eight days to complete the Testing portion of this project. The cost of this with *BugBusters* will be around \$11,979.00 U.S. dollars. Our baseline project we originally created was around \$11,760.00 U.S. dollars and will only take our team members ten days to complete the Testing phase. Our Project Manager has decided that we should outsource this phase to another company that specializes in product testing.

Our Project Manager will have to communicate and inform our stakeholder why this project will be delayed and slightly over budget. Our budget will only be over around two-hundred U.S.

dollars, however, that is not the big issue. The issue is that our project completion will be pushed back around fifty business days. Our stakeholder will be very upset about this decision, however we believe it will be best for the team and well as the finished software for Husky Air. With *BugBusters* and their abundant amount of testing days, we guarantee that when the software is done, there will be no bugs, no viruses, and everything will meet the requirements and standards the stakeholder asked. With outsourcing this phase to experts on the matter, it will benefit us and the project in the long run. If our team had completed the Testing phase that only was ten days, but there were a various amount of bugs or defects then we would still be behind, and probably way off budget compared to losing 200 U.S. dollars to *BugBusters*.

Appendices: Microsoft Project Tutorials:





Project1 - Project Professional

FILE TASK RESOURCE REPORT PROJECT VIEW GANTT CHART TOOLS FORMAT

Team Planner View Assign Resources Pool Add Resources Insert Information Notes Details Level Selection Resource Level All Level Clear Leveling Next Overallocation

Today

Start Wed 9/13/17 Thu 9/14 Fri 9/15 Sat 9/16 Sun 9/17 Mon 9/18 Tue 9/19 Finish Tue 9/19/17

Add tasks with dates to the timeline

Task Mode Task Name Duration Start Finish Predecessors

1 EC Project 5 days Wed 9/13/17 Tue 9/19/17

2 Testing Assign Resources

3 Test Task Testing

4 Test Resource list options

5 Test Resources from Project1

6 Resource Name R/D Units Cost

7 Kevin 100% \$565.38

8 Pat 100% \$1,000.00

9

10

11

12

13

14

Carry out test plan 5 days

Analyze results 4 days

9/13

READY NEW TASKS - MANUALLY SCHEDULED

Type here to search

11:08 PM 9/13/2017

Project1 - Project Professional

FILE TASK RESOURCE REPORT PROJECT VIEW GANTT CHART TOOLS FORMAT

Team Planner View Assign Resources Pool Add Resources Insert Information Notes Details Level Selection Resource Level All Level Clear Leveling Next Overallocation

Today

Start Wed 9/13/17 Thu 9/14 Fri 9/15 Sat 9/16 Sun 9/17 Mon 9/18 Tue 9/19 Finish Tue 9/19/17

Add tasks with dates to the timeline

Task Mode Task Name Duration Start Finish Predecessors Resource Names

1 EC Project 5 days? Wed 9/13/17 Tue 9/19/17 Pat, Kevin

2 Testing 5 days? Wed 9/13/17 Tue 9/19/17

3 Test Plan

4 Define features and functionality to test 4 days Kevin

5 Define test methodology 3 days Kevin, Pat

6 Design test cases 2 days Pat

7 Develop responsibility matrix 1 day Kevin

8 Develop test schedule 5 days Pat

9 Review plan with developer 1 day Kevin, Pat

10 Milestone: PM signs off on test plan 0 days

11 Test Results Report 5 days Wed 9/13/17 Tue 9/19/17

12 Review test plan with client 1 day Kevin, Pat

13 Carry out test plan 5 days Kevin

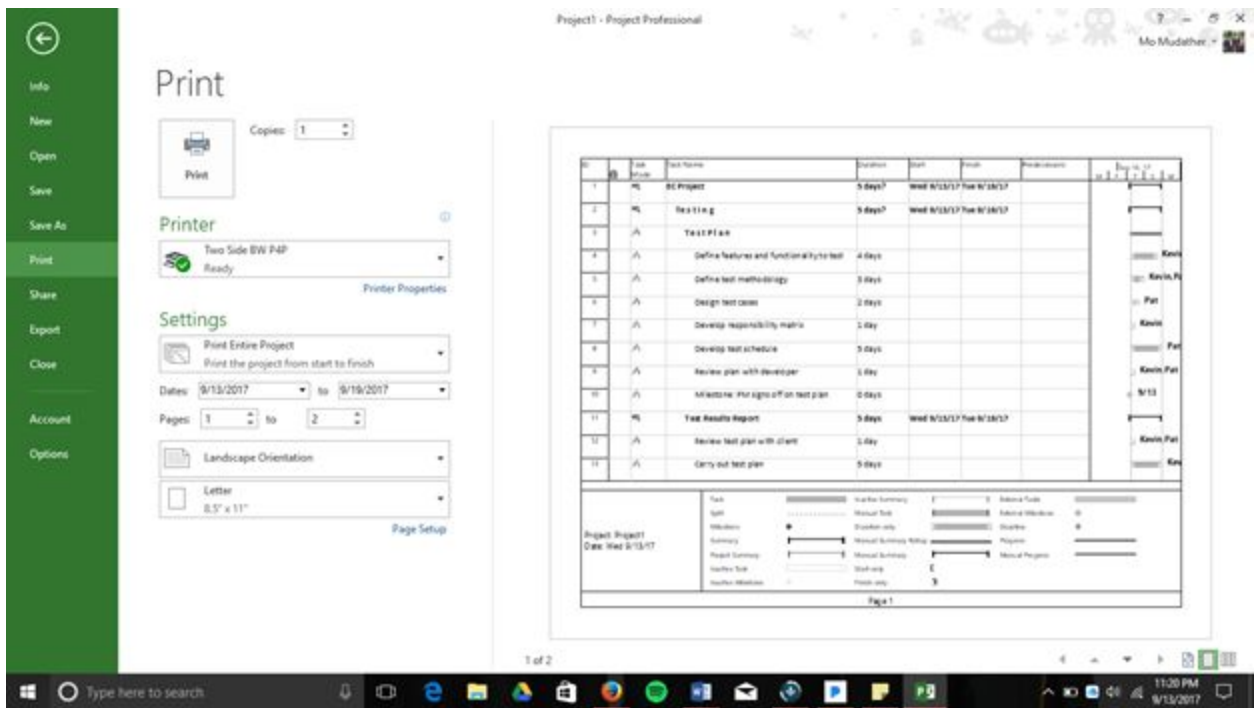
14 Analyze results 4 days Pat

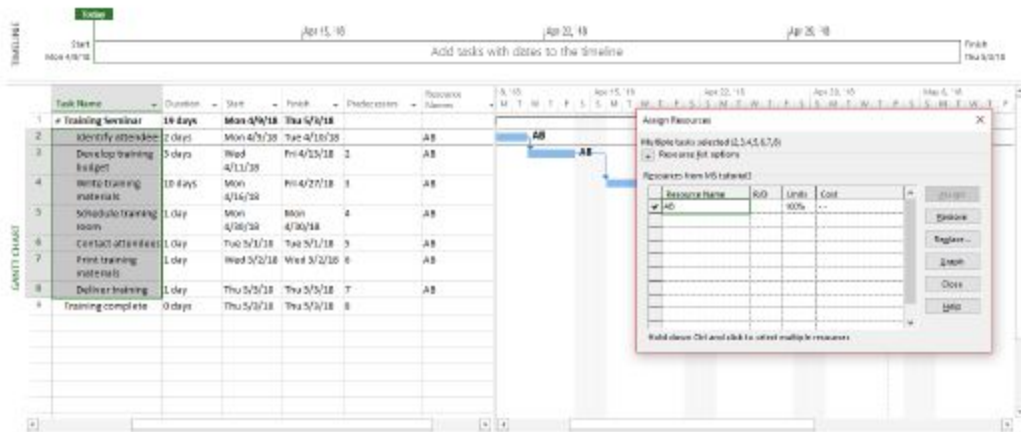
9/13

READY NEW TASKS - MANUALLY SCHEDULED

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	Start	Finish
Current	Mon 4/9/18	Thu 5/3/18
Baseline	NA	NA
Actual	NA	NA
Variance	0d	0d

	Duration	Work	Cost
Current	19d	152h	\$3,800.00
Baseline	0d	0h	\$0.00
Actual	0d	0h	\$0.00
Remaining	19d	152h	\$3,800.00

Percent complete:

Duration: 0% Work: 0%

Close

		Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Pre
1			4 Training Seminar	19 days	Mon 4/9/18	Thu 5/3/18	
2	✓		Identify attendee	2 days	Mon 4/9/18	Tue 4/10/18	
3	✓		Develop training budget	3 days	Wed 4/11/18	Fri 4/13/18	2
4	✓		Write training materials	10 days	Mon 4/16/18	Fri 4/27/18	3
5	✓		Schedule training room	1 day	Mon 4/30/18	Mon 4/30/18	4
6			Contact attendees	1 day	Tue 5/1/18	Tue 5/1/18	5
7			Print training materials	1 day	Wed 5/2/18	Wed 5/2/18	6
8			Deliver training	1 day	Thu 5/3/18	Thu 5/3/18	7
9			Training complete	0 days	Thu 5/3/18	Thu 5/3/18	8

