

Module 8 Final Project

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Task 1 - Develop the project charter for the health-care app project.

Project Charter 04/27/2021	
Project Title: Third Avenue Software Health-Care App Project	
Project Start Date: 05/01/2021	Projected Finish Date: 09/01/2021
Budget Information: The total budget being allocated to the project is \$350,000. The budget for the completion of the MVP is \$120,000.	
Project Manager: Ben Hanson	
Project Objectives: This project will serve as a “one-stop shop” for customers health-care information and needs. The project will utilize Agile and Scrum for development. The average user will be older, meaning the usability will be extremely key. An MVP will be released within six weeks, followed by the final release in four months. The project will contain eight major feature sets.	
Success Criteria: The project members must remain engaged in the project and on-page with each other regarding project scope and discussions. During sprints, employees must be in complete agreement. Furthermore, the company must remain engaged in the project as well.	
Approach: Staff the project team accordingly Use agile and Scrum principles in development Usability must remain a major importance The app must be monetized appropriately Requirements and scope must be gathered Company standards should be maintained Accurate testing must take place	

Name and Signature	Role	Position	Contact Info.
Ben Hanson	Project Manager	TAS Manager	Ben@TAS.com
Eric	Junior Programmer	Project ScrumMaster	Eric@TAS.com
Lia	Junior Programmer	TAS IT	Lia@TAS.com

Brianna	Team Member	Project marketer	Brianna@TAS.com
Jack	Team Member	Project Regulatory Manager	Jack@TAS.com
Kendra	Team Member	Project Quality Assurance Manager	Kendra@TAS.com

Task 2 - Develop user stories and technical stories to describe the software requirements for the health-care app.

User story 1: Concerning the Fitness Tracker feature of the app, the customers fitness information must be available in a separate window that is easily accessible from the main view of the app.

Technical story 1: In order to display the Fitness Tracker service in a separate view that is easy to find, the app must appropriately integrate navigation views which allow for easy switching between the different view controllers. There must be a clear navigation menu within the app's home screen/view.

User story 2: As a customer, I should be able to enter their medications and schedules into the medication tracker in an easy, clear manner. The calendar must have high usability features implemented.

Technical story 2: In order to create an easy process for the customer to enter his/her information for the medication tracker, there must be clear and visible control over text entry size and other usability features. The calendar must also display schedules and reminders that are clear and obvious. Settings for the user should be implemented clearly within the app's view.

User story 3: As a customer, I should be able to create an emergencies list with minimal effort themselves. Once an address has been entered from the user, a GPS map should be displayed in a clear manner.

Technical story 3: In order to implement the emergencies list, several phone numbers should be entered automatically. This system should link to geolocation to determine closest hospitals, addresses and phone numbers to the customer.

User story 4: As a customer, I should have minimal text input when storing emergency information. Certain important information regarding specific health conditions should be entered automatically.

Technical story 4: As a customer, to incorporate minimal text input for the user in the emergency information list, once the customer enters in a health condition, important information regarding that condition, such as reactions to drugs, should be outputted.

User story 5: Within the payment feature, customers should be provided with easy assistance and help from within the app. Assistance should be provided for making payments via the app.

Technical story 5: To provide customers with easy assistance in the payment feature, virtual live chat could be enabled to assist the customer and answer any questions. Also, a video could be displayed showing the customer how to properly navigate through this feature, check bills, and make payments. The customer should also be provided with phone numbers and email addresses to the hospitals or services in which they have medical expenses.

User Story 6: As a customer, I should have the resources feature provide me generated health sites and articles that are directly correlated to my health condition.

Technical Story 6: To generate sites that are in correspondence to the customers health-condition, this feature should gather the results from the emergency information list (feature 5), then generate sites regarding their condition.

User Story 7: As a customer, in the physician's list I should be provided with suggested contact information based on my current contacts and previous health-care information. This should also cover health insurance contacts.

Technical Story 7: To provide them with this feature, the app will gather the customers current contacts on their phone, as well as a text field where they can enter in their appropriate insurance carrier.

User Story 8: As a customer, the entire application layout should provide me with many usability features making the experience easy for an older than average mobile application user.

Technical Story 8: To provide the users with a high level of usability, there will be many usability principles implemented into the development process. Future testing and review will be required to increase the overall ease of use.

Task 3 - Develop an initial scope statement.

Scope Statement (Version 1.0)	
Project Title: Third Avenue Software Health-Care App Project	Prepared by: Ben Hanson
Date: 04/27/2021	
Project Justification: Third Avenue Software is a company that has developed several mobile applications. The company is trying to create their corporate identity and permanent footing. While their other applications have been moderately successful, the new health-care app project has a chance to be a best-seller. The team's established experience with agile and Scrum principles, as well as an existing budget makes this project a very good opportunity for the company.	

Product characteristics and Requirements:

Project will utilize agile as well as software complexity ratings.

The project's development will be Scrum oriented

An MVP version will be released within six weeks, followed by reviews and testing

Usability will be a major focus as most customers will be older than the average user

Customer privacy and sharing customer information is a priority

Seven major feature sets will be incorporated

Project must be within the budget, including the MVP

The Sentinel project scheduling approach will be deployed

Two week sprints will occur, based on agreed upon user stories

Summary of Project Deliverables:

Project management-related deliverables: business case, project charter, user stories, technical stories, scope statement, schedule, status reports, project milestones, final project presentation and reports, and other required documents.

Product-related deliverables: research reports, design documents, software code, hardware, ect.

1. Research Reports: All of the primary data and secondary data which is required for the project will be prepared.
2. Design Documents: The function and programmed design will be prepared.
3. Software Code: All software code will be deployed at an accurate time.
4. Hardware: Hardware requirements will be made available at the right time.

Functional and Design Specifications:

User stories as well as technical stories will be a primary focus when approving functional and design specifications. The project must maintain a high level of usability and monetizing appropriately.

Success Criteria:

The project members must remain engaged in the project and on-page with each other regarding project scope and discussions. During sprints, employees must be in complete agreement. Furthermore, the company must remain engaged in the project as well.

Project Boundaries, Constraints, and Assumptions:

The MVP release must take place within six weeks of development

The MVP has a budget of \$120,000

The total budget for the project is \$350,000

The finalized project will be completed within four months

The team will focus on working in sprints, or two week periods

- 1: Market analysis and cost analysis
- 2: Plan and Model
- 3: MVP development deploy
- 4: MVP prototype review/testing
- 5: Release the beta version of the project
- 6: Maintenance and quality control

GANTT CHART

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	Milestone 3		6/7	6/9	3		
	User Story 1	TBD	6/9	6/12	2		
	MVP Release	TBD					
	Sprint 4				14		
	Feature 3	TBD	6/12	6/16	4		
	QA testing of Feature 2		6/16	6/19	3		
	User Story 7	TBD	6/19	6/23	4		
	Milestone 4	TBD	6/23	6/26	3		
	Sprint 5				14		
	Feature 4	TBD	6/26	7/2	6		
	QA testing of Feature 3		7/2	7/6	4		
	User Story 3	17	7/6	7/10	4		
	Sprint 6				14		
	Feature 5		7/10	7/15	5		
	QA testing of Feature 4		7/15	7/19	4		
	User Story 4	22	7/19	7/24	5		
	Sprint 7				14		
	Feature 6		7/24	7/28	4		
	QA testing of Feature 5		7/28	8/1	4		
	User Story 6	15	8/1	8/4	4		
	Milestone 5	TBD	8/4	8/7	3		
	Sprint 8				14		
	Feature 7	TBD	8/7	8/11	4		
	QA testing of Feature 6		8/11	8/13	2		
	User Story 5	13	8/13	8/16	3		
	Quality control test completion		8/16	8/19	3		
	Milestone 6	TBD	8/19	8/21	2		
	Sprint 9				14		
53	Sprint 9				14		
54	QA testing of Feature 7		8/21	8/25	4		
55	Project release		8/21	8/23	2		
56	Final project report	TBD	8/23	8/27	4		
57	Final project presentation	TBD	8/27	9/1	4		
58							
59							
60							

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Basic Framework of Quality Assurance test Specifications

The team will use the PDCA cycle, otherwise known as the Deming cycle for the Quality Assurance testing. The four main phases of this cycle are Plan, DO, Check, and Act. This is what will be used to test the health-care application.

Plan: Company will plan and establish the process related objectives and determine the processes that are required to deliver a high quality product in the end.

Do: Development and testing of processes and take place in changes to the processes

Check: Monitoring of processes, modifying the processes, and determining if it meets certain objectives.

Act: A Quality Assurance tester will implement actions which are necessary to achieve improvements within the processes.

Task 5 - Prepare a Cost Analysis

Average production cost of 1 story point = \$1200

(Feature 1) User Story #1: **20 story points x \$1200 avg. production cost = \$24,000**

(Feature 2) User Story #2: **20 story points x \$1200 avg. production cost = \$24,000**

(Feature 4) User Story #3: **30 story points x \$1200 avg. production cost = \$36,000**

(Feature 5) User Story #4: **25 story points x \$1200 avg. production cost = \$30,000**

(Feature 7) User Story #5: **20 story points x \$1200 avg. production cost = \$24,000**

(Feature 6) User Story #6: **25 story points x \$1200 avg. production cost = \$30,000**

(Feature 3) User Story #7: **30 story points x \$1200 avg. production cost = \$36,000**

User Story #8: **40 story points x \$1200 avg. production cost = \$48,000**

Total = \$252,000

Based on these values, the cost does appear to be within the overall budget of \$350,000.

With a BAC of \$350,000, a PV of \$105,000, an EV of \$122,000, and an AC of \$105,000:

Cost variance (EV - AC) = 17,000

Schedule variance (EV - PV) = 17,000

CPI (EV / AC) = 1.1619

SPI (EV / PV) = 1.1619

$$\text{EAC (BAC / CPI)} = \$301,205$$

Based upon these calculations the project does appear to be on schedule and within budget. The reasoning behind this is because a CPI of 1 or above indicates that the project is performing well within the budget. An SPI of above one indicates that the project is progressing well against the schedule.

Task 6 - List of Quality Requirements for Testing

1. Fitness tracker: The fitness tracker feature will require several text input fields where users can enter important health information such as blood pressure readings, cholesterol levels, exercise regimen and calorie intake. It must be clear and hold high usability standards so users can understand.
2. Medication tracker: First, users must be able to enter medication information and schedules into a text field. Then the feature must display a calendar showing when meds need to be taken. Users must be provided with customizable features to the calendar.
3. Emergencies list: Customers are prompted with text input fields where they enter data regarding important phone numbers and addresses. Users location should be gathered, outputting contact information to close by hospitals, urgent care clinics, and more. Furthermore, when the map is displayed there must be high level usability features.
4. Physician's list: This feature will allow the user to easily import related existing entries from their current contact lists. The electronic address book should be very easy to use, read, and understand for the customer.
5. Payment feature: This feature should also hold high standards of usability. Customers should be able to easily enter in payment information. Also, users should clearly understand how to

navigate through their medical expenses within the app. The payment feature should support all applicable payment methods

Task 7 - Develop a probability/impact matrix to document risks to the health-care app project.

Below is a probability/impact matrix which will be used to record risks towards the project. Also listed are six potential risks for the project, which are also documented in the probability/impact matrix as example.

Risk	Probability	Impact
Key members leaving the organization	7	9
Status info is lacking information	6	8
Employee Productivity	5	6
Uncooperative users	4	7
Risk	4	3
Time	3	3

<u>PROBA BILITY</u>			
High			Risk 1
Medium		Risk 4	Risk 2

Low	Risk 6	Risk 3 Risk 5	
	<u>IMPACT</u> Low	Medium	High

Task 8 - Create a stakeholder management plan

Stakeholder Management Plan

Name	Power/Interest	Current Engagement	Potential Management Strategies
Lia	High/High	Unaware	Lia is a very skilled programmer who has brought a lot of value experience to the company. She has performed very well and has become very communicative. Lia appears to not have the sufficient resources when it comes to her development as she has been introduced to other apps within the company as well.
Eric	High/High	Resistant	Eric is a very skilled programmer who has done great work for this app and the company. However, he does not take advice from management well and is very defensive over his work. He has struggled fitting into the team environment and should be reminded he is a valuable asset to the team.
Aziz	High/High	Supportive	Aziz has been excellent in terms of his QA testing. His experience with programming has also been a major benefit to the team as he is able to lay out concerns in an understandable way to others. Aziz also communicates very

			well with the team in meetings and updates.
Brianna	High/High	Supportive	Brianna has been excellent in her marketing activities. Her experience in the health care world has been a major benefit to the team. She gets along very well with Aziz and Brianna. However, she feels attacked by Jack. She should be convinced that Jack only wants to increase the team's production.
Kendra	High/High	Neutral	Kendra believes that strategies should continue to be improved and updated as needed to monetize the software at the highest level possible.
Ben	High/High	Supportive	Ben believes that QA testing may need to make a slight change to their focus after the app has been released to the field with hopes of high market penetration.

Task 9 - Create an issue log for the project's main activities.

Issue Log

Description	Impact	Date Reported	Reported By	Assigned To	Priority	Date Due	Status	Comments
Calorie intake field under fitness tracker allows for letters	High importance	May 13	Ben H. (Product Owner)	Eric	High	May 19	Closed	Simple fix but high importance
Quality Assurance input needs to be more specific	High importance	May 27	Eric	Kendra	High	May 10	Open	None

GPS map in emergency information list is not working appropriately	High importance	June 4	Eric	Lia	High	June 11	Open	Should be addressed ASAP. Map is not interactive.
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Task 10 - Research and develop a potential software license for the health-care app.

To develop a potential software license for the health-care app, a lot of research took place. A website was found where I filled out a series of forms, asking questions surrounding what type of license and software the company would be using. This included software features, budget and more. After reviewing the recommendations I believe that either a GPL license or a license through Epic would be best for the health-care app.

References

Schwalbe, K. (2018). *Information Technology Project Management*. [VitalSource Bookshelf].

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Get real advice from real people. Software Advice. (n.d.). <https://www.softwareadvice.com/>