

# Software Engineering

Assignment-1
Group II
Project Plan Template

By Jaya Krishna Mandivarapu Nicholas Solmon Yesu Kiruthiga Sekar Ke Wang **Project Name:** Event Me

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Group Members: Jaya Krishna Mandivarapu, Kiruthiga Sekar, Nicholas Yesu, Ke Wang

**Group:** Group II

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#### 1. Brief Resume

# Jaya Krishna Mandivarapu

I am currently pursuing a Ph.D. in Computer Science in the field of Deep Learning. I did a Masters in Data Analytics from Georgia State University. I am native of India, and I did my schooling from Abudaya high school, further to that, I did my engineering from Gudlavalleru Engineering College, India with specialization in Electrical and Electronics engineering. I have worked with Cognizant Technology Solutions as a Programmer Analyst and holding three years of total experience in this domain, and with expertise in skills like React, Python, R, NLP, Deep Learning (Pytorch, Tensor Flow), AWS, Microsoft Azure Machine Learning, Java, MongoDB and Neo4j.

# Kiruthiga Sekar

I am a Graduate Student at Georgia State University. My major is Computer Science. The languages that I am inclined in are Python, Java, MATLAB, and HTML. I successfully completed my Bachelor of Engineering in Computer Science with a FIRST CLASS WITH DISTINCTION. My final year project was *Infant Security System using Biometric Authentication, RFID and Wireless Fidelity*, which one Second prize in Loyola Institute of Technology. I am an enthusiastic, highly motivated student, who adores taking the initiative and seeking new challenges.

#### Nicholas Yesu

I am a GSU Senior in CS. I was born and raised in Atlanta, Ga. I am a self-disciplined graphic designer with the professional background; I love to work with others to attain a higher goal.

## **Graphic Design & Programming Skills**

Proficient in Adobe Photoshop and Illustrator / Versatile Business Skills/ Proven Leadership Abilities/ Working Knowledge of Languages Java and HTML/CSS

## Design/Soft Skills

- Customer Friendly, Strong Work Ethic, Team Oriented, Organized, Typography, Creativity, Layout Design, Design for Web and Print,
- Upcoming graduate of Georgia State University with a BS in Computer Science
- Solid foundation in marketing, sales, customer service, and computer information system

# Ke Wang

My name is Ke Wang. I am an undergraduate student at Georgia State University. My major is Computer science with Concentration on Database. Throughout three years of study in college, I have developed skills in Java, c, and python. I have also learned Assembly language with self-studying. Although I am a very independent person, I like to work as a team, because I think communication is very important in computer science.

# 2. Planning and Scheduling:

Name	Email	Task	Duration	Dependency	Due Date	Note
Jaya Krishna Mandivarapu	Jmandivarapu1@s tudent.gsu.edu	Formatting, Creation GitHub, Trello, Organization	2 hrs.		September 16, 2019	Finished all the works assigned in time
Kiruthiga Sekar	ksekar2 @student.gsu.edu	Teamwork Basics Provide a layout of the report Personal Brief Resume	2 hrs.		September 16, 2019	Finished all the works and changes on time
Nicholas Yesu	nyesu1 @student.gsu.edu	Project Ideation, Organization, Problem Statement	2 hrs.		September 16, 2019	Modified the problem statement as discussed
Ke Wang	kwang15 @student.gsu.edu	System Requirements, Making sure all the guidelines are fulfilled	2 hrs.		September 16, 2019	Modified the System Design as discussed

#### 3. Teamwork Basics

As quoted by famous Behavioral Scientist "Iyanala."

"The way to achieve your own success is to be willing to help somebody else in the team to get it first."

Teamwork is a key concept of people working cooperatively together to achieve a common goal. With teamwork, it is easier to achieve a goal rather than working individually. Communication is the key to a good team. Working in a team is not a joke, because every individual will have a different opinion/perspective, it is important to consider every team member's views and make a final call. It is also important to respect every member's view and idea. When a particular team member is struggling with their piece of work, it is important for the other members to step up and help. Working in a team helps us to learn the unknowns.

# 3.1 Key Concepts of Teamwork:

#### **Ground Rules for the Team:**

#### **Work Norms:**

- 1. Each member of the team come up with a time that works for them, to schedule a meeting.
- 2. During the meeting, each member expresses their opinion and their way of approach towards a problem.
- 3. If there is any conflict with the other member of the team, then voting system is followed in order to determine the majority opinion.
- 4. Work distribution and deadline will be decided during the start of each sprint.
- 5. Every team member is responsible for completing the task assigned to them within the given time frame.
- 6. If a team member is unable to perform the assigned task, he/she asks for help with others
- 7. Notify the team about any possible changes to the project.
- 8. It is important to review and appreciate other team members work.
- 9. If any work does not satisfy the requirement of the project, it is advisable to redo it, before the project delivery.

## **Facilitator Norms:**

- 1. Facilitator is usually the team coordinator.
- 2. Each team member gets a chance to be the facilitator for each sprint.
- 3. It is important, that the facilitator should remain neutral.
- 4. The facilitator assists the team, in order to achieve the goal.

5. Summarize the team decisions.

## **Communication Norms:**

- 1. Slack channel is used as the platform for communication.
- 2. Trello is used for work distribution.

# **Meeting Norms:**

- 1. Classroom meetings, which is schedule before or after the class.
- 2. Skype meetings are scheduled, when required.
- 3. The facilitator is responsible for coordinating the meetings.
- 4. When a member is unable to join the meeting, he/she is informed in Slack about the important key points discussed during the meeting.

## **Consideration Norms:**

- 1. One cannot eat or smoke during in-person meetings.
- 2. It is important that every member has a chance to talk/express their views during the meeting.
- 3. Domination during a meeting is not encourages.
- 4. If a member is not comfortable with what is going on in the team, it is important to express that to the team.
- 5. Any conflict should be addressed.

# **Handling Difficult Behavior:**

It is important for every team member to participate equally, in order to be productive. Just one difficult personality can make the group unproductive and make the team unpleasant. Some suggestion for handling difficult behavior are as follows:

Behavior	Description	Handling Suggestion
Too quiet	The person might be shy,	This behavior can be
	tired or bored	handled by asking their
		suggestion on a particular
		issue and appreciating
		their participation
Too talkative	This kind of person might	It is important to talk to
	be either showing off or	that person in private, so
	too interested in the	that his/her behavior does
	project	not affect other team
		members

Arguing	The person might be	It is important to explain
	stubborn on his/her	the person about their
	opinion	behavior and educate
		them about the importance
		of teamwork

It is important that every team member stay committed to the team and contribute equally. It is important to maintain a sense of harmony within the group and to compliment each other's contribution.

We used Slack Application to communicate with one another; in that way, it is easier for us to split the task and work parallel. We made a clear plan on what role each of us plays in this project. We used the Trello dashboard to see every task, which is assigned to each individual person.

# 3.2 Team Building Principles:

1	Have purpose	
2	Set clear objectives	
3	Involve your team when creating the agenda	
4	Agenda has a relational flow	
5	Design a follow up plan	
6	Have time to network	
7	Have time to feedback (Recognition and improvements)	
8	Have Fun !!!!!	
9	If possible, have an external so you can patriciate	

#### 4. Problem Statement

**4.1 Product Overview:** Our product is a completely online event planner called Event Mewith versatile features that allow the user to individualize their event and not worry about rest of additional things needed for the event. User or Client can just create event with us and we will take care of the rest of the things like decoration, food..etc needed for the event. Our product not only saves time for the clients but also will be helpful in getting the whole event package at a lower price. Functionalities for the overview of the project will first have to include our landing page that will house our different services and pages for the user, the second mandatory page will be the payment option page. This page will require the user to input a payment option or third party payment like paypal or google pay so they can secure their events on schedule. The next mandatory page will be the main function of the website which will be the create event page, this page will allow the user to create a new event and allow them to select different assets from the resources we offer, that includes type of event, assets, location, and date. Subfunctions of the event page will include edit event and delete event. The create new event/edit existing event requires the user to make an account and sign in. The next page is our services page, this page does not require the user to sign in because the function of this page is just so the user can look and see what types of events we offer, the types of assets we offer, and so on. This gives the user an idea of what we can offer them without committing to making an account and starting the process. The next page is the gallery or (history), the functionality of this page like servies is so that users can view the past events created and brought to life by EventMe.com, this pages main purpose is to create a trust and confidence with the user so they can feel more comfortable with the website before they start their first event with EventMe. As an overview we're going to be focusing on the database API and the back end so that we can hold all the user data securely and create a fluid design on the front end so the process can take under 30min to create an event fast and easy. We're planning on using html/css, javascript, react, (possibly mysql), java, and Adobe Suite for UI/UX as the main languages to create and run this platform.

**4.2 Targeted Customers:** This product is meant for anyone who organizes events individually or professionally ranging from lower price level to higher price level. We also target customers who want to hassle-free events with low budget and simplicity. This can also include businesses who want to organize events at their offices or schools who'd like to plan an event for their students. EventMe services organizations as well as Individuals to allow them to create the event to their choosing and tailor an event to each individual

#### 4.3 What Problem Does It Solve?:

The functionalities of this website provide a way for us to implement a fast and easy way to plan an event. The payment page will take a down payment of the event to secure your details like date and location so that you don't have to worry about scheduling after you've created your event. The Create

and Event page will solve the main issue of there being so much time and planning going into an event and transforms it into a page with multiple options that allow the user to customize their event in many different ways and potentially can take up to 20-30min which is exponentially faster than going about it on your own or hiring a event planner yourself. The gallery and services pages help create a confidence with the user which solves the issue of trustworthiness of the website also gives a realistic and honest example of what the user can accomplish by using EventMe.com. This page also allows us to process our data quicker in chunks and can expedite the process. The main problem that EventMelooks to solve is the long and complicated process of planning an event, with EventMe we plan to expedite the process and make it easier for the user/client so that they don't have to manually plan the event themselves or hire an expensive event planner. EventMe streamlines and simplifies the event planning process to optimize efficiency. (Saves time and money). Apart from solving the existing the event planning process it also create a unique opportunity to combine the distributed field of individual things in event planning like decoration, food .. etc to come together and to form an unified model in the field of Event planning.

**4.4 What Alternatives Are Available?:** As far as a completely online solution, there is none (currently) other alternatives include professional event planners (expensive and tedious).

**4.5 Why Is This Project Compelling and Worth Developing?**: The solution we created allows the user to organize a quality event in under an hour; this saves the user time, money, physical trips, etc. It also open the gateway to field of new collaborations between different departments and event will be responsible for bringing down the prices of the event planning. As the current event planning in US costs a lot of money ranging from tens of thousands to millions. Our product will have direct impact on thousands of users.

#### 4.6 Scope asnd Objectives:

Describe the top-level objectives, differentiators, target customers, and scope of your product.

• Our target customers range from 18yr-60yr old individuals that are looking for a simpler solution to event planning. Our Top Level Objectives include creating a database and API on the back end and design intuitive UI for the pages on the front end. Our Differentiators include easy access to efficient event planning software, ability to customize details quickly and on the go, time and cost efficiency for professionals, etc. The scope of our project includes our top-level objectives as well as giving the user an easy to use interface and ability to customize their events after making it.

#### 4.7 Product Competition:

What are the competitors, and what is novel in your approach?

• Our competitors are general planning software (not as big) and professional event planners.

Make it clear that the system can be built, making good use of the available resources and Technology.

- The bulk of our front end and the back end would be HTML/CSS, Nodejs and JavaScript as well as React for database/API reasons. The online event planner system is definitely in the realm of execution based on the languages mentioned above. With these languages (HTML/CSS and Javascript) we can create a fluid design on the front end that rivals our competition websites (not many) and makes it simpiler than hiring a professional event planner who usually only offers only specific event types per planner. Our initial drafts for our pages can be built with UI/UX software before we develop it just so we can nail in our design first. The development of the front end will mainly come from the HTML/CSS & Javascript components of our execution to allow us mimic what we created for the UI. The React/Nodejs (and possibly mySQL) will serve as our main asset to creating and maintaining our database to hold user information in reference to our novel approach. (how we will approach this project).

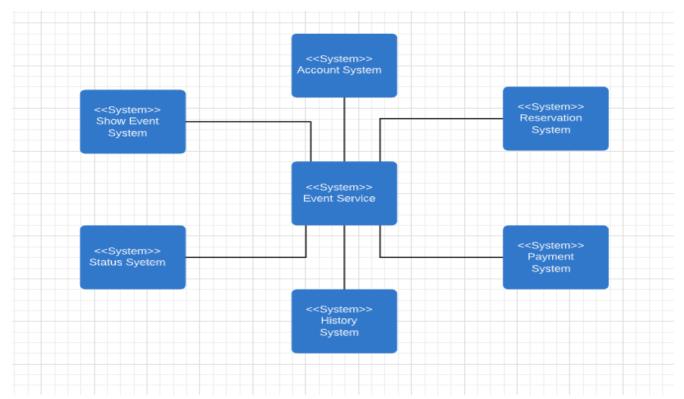
#### 4.8 Innovation:

What is interesting about this project from a technical point of view?

-This is interesting from a technical viewpoint because of the relationship we will build from front end to back end with the array of languages we plan to use so that we can achieve a seamless user experience. We will be using up to the mark front-end languages, which is technically robust and secure. For building the backend and API we will using AWS (Amazon Web Services) which will provide us will in build security and all the backend services will be written in Nodejs. All the data will be stored in the Cloud using NoSQL database Mongo db and our database will have auto backup options which is needed in case of any malfunctions.

(Please refer to our Technical Architecture Section for Further Information)

# 5. System Requirements



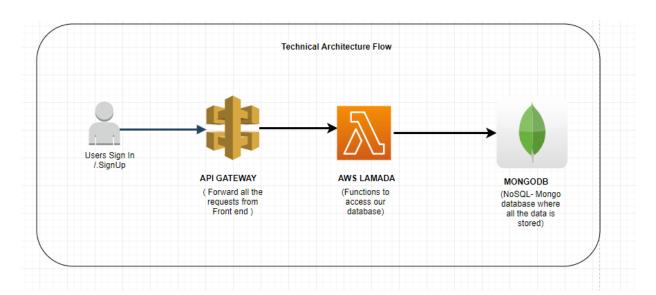
This context model that shows our system and the other systems in its environment.

**Event service System:** Main system, all other systems will connect to it. **Account System:** This system manages customer's personal account. **Reservation Service System:** This system helps costumers reserve available desired events.

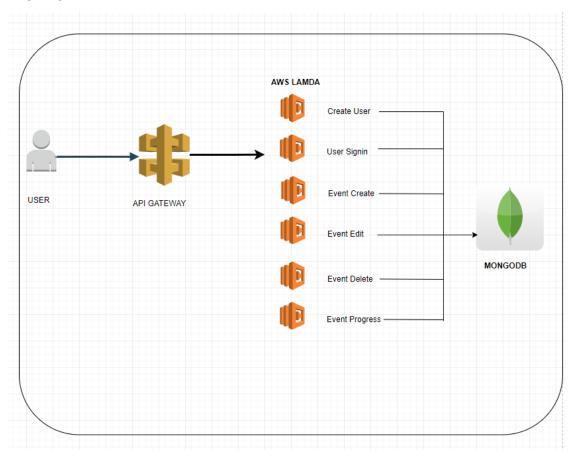
**Status System:** Show to the reserved customers their current state of the services, this system will be updated constantly whenever a change is made. **Payment System:** Customers will be able to make a payment for our services. **Show Event System:** Show customers all the available events under our services. **History System:** Allow customers to view their pervious history of our services.

# 6. Technical Architecture:

## 6.1 Architectural Workflow:

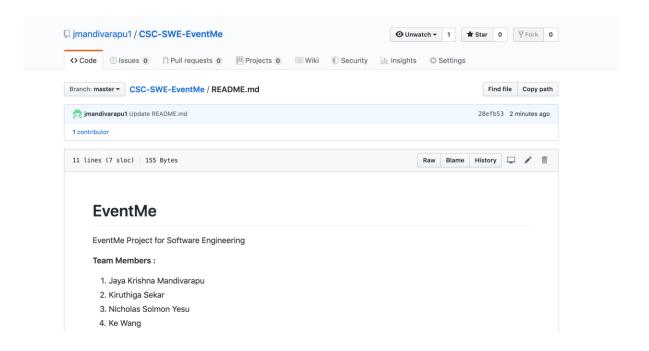


# 6.2 API Workflow:



#### **APPENDIX**

#### 1. GITHUB



#### 2. Trello Channel for TeamWork Distribution and Architecture

