# CEN 4090L: Software Engineering Lab

**Florida State University**

**- Group Project Proposal Template –**

*Please use this template to write your project proposal. All the text in italic should be removed from your final submission.*

***The project needs to be original and complex enough to justify and reflect the intensive work of 4-5 people for about 5-6h/week per person, over the course of about 3 months.*** *Mobile apps, games, web apps are encouraged. Some examples of previous project proposals can be found on Canvas. Mind that this project is meant to stretch your comfort zone and that you may need to learn new technologies, programming languages, APIs, platforms, etc. on your own to be able to deliver a good project.*

***IMPORTANT NOTE:*** *Your team may be requested to schedule a meeting the instructor and/or TAs after the proposal is due, in order to answer clarification questions or in order to get feedback and/or adjust any aspect of your project. Only after everything is cleared, you get the go-ahead for the project.*

1. **Project title**

*GrindChat*

1. **Brief overview of what you are proposing**

*Our project, "GrindChat", is a .NET project that aims to be a simplified version of platforms such as Slack. It will facilitate user interaction in teams, allowing them to exchange messages and data seamlessly.*

1. **Motivation**

*Our motivation is to create a version of Slack that is less complicated and more user-friendly. We aim to develop a professional chat application that could serve as an excellent alternative for college students and others seeking a straightforward communication platform.*

1. **Features to be implemented and types of users**

*List the features you will implement and a list of types of users/roles if you plan to support different types of users (e.g., regular user, admin, student, coach, etc.) and list the features that each role will be able to access. Be as detailed as possible.*

*In the first prototype we want to establish two entities: User and Team. These two will have a many-to-many relationship with each other and interact in such a way that Users can create Teams and Teams are comprised of different Users. The Users will consist initially of six properties, Id, Name, Status, Email, Password, and a List<Team>. And for the first prototype Teams will consist of Id, Name, and a List<User>. Users should be able to message other people directly or have the option to create group chats or channels and have some customization options for said groups.*

1. **Risk / Challenges**

*List any factor that can prevent you from implementing all the features and completing your project.*

*One of our initial challenges involves establishing the many-to-many relationship between the User and Team entities. We continue to deliberate on the best approaches for implementing this database schema. Figuring out how to implement real-time messaging and posting so that users may communicate with one another might come as a challenge to us.*

1. **Existing related projects**

*Do some research to find out if similar applications already exist. If there are similar applications, please mention them (put a link or reference to where you found them) and mention how your application will be different/better than existing projects.*

*Slack*

*Discord*

*Workplace from Meta*

*Microsoft Teams*   
  
*Applications such as Slack, discord, and Microsoft Teams all perform similar functions and fulfill similar purpose to our project. However, unlike these applications, we aim for simplicity and user-friendliness that is superior to other similar apps.*

1. **Intended platform / programming language**

*(e.g., iOS, Android, Web, Python, C++, Java, JavaScript, etc.)*

*C#*

*.NET*

*MySQL*

*(some intercommunication service that we have not figured out yet)*

1. **Third-party libraries / APIs to be used**

*Please mention any external Web service, library, database, web server, web container, application server, specialized hardware, etc. that you plan to use in your project, to the best of your abilities.*

*ASP.NET and Web Development*

*Node.js Development*

*Mobile Development for .NET*

*.NET Desktop Development*

*MySQL*

*VScode*

# Team members, expertise, project responsibilities, and team organization

*List the team members, their FSU IDs, and each member’s expertise, such as the programming languages, databases, mobile programming, platforms, APIs, etc. each is comfortable with. Mention who will do what during the project. Mention also how your team will be organized (e.g., will you have a manager in charge of delegating tasks or will you decide together based on interests/skills?), what will be your communication like (will you use Slack, Canvas or something similar to communicate? How often will you meet in person?), etc.*

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| --- | --- | --- |
| *Oteo Mamo* | *om21d* | *Full-Stack Development, Mobile Programming, C++, Python, Database – SQLite, MySQL, JSON, Web Development, Git* |
| *Yazhu Song* | *YS21J* | *Full-Stack Development, C++, Java, Python, MySQL, HTML, CSS, Git* |
| *Riley Ratto* | *rmr21c* | *C++, Java, Python, HTML, CSS, Web Design and Development* |
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*We will collaboratively determine the distribution of tasks based on our individual skills and interests. Initially, we plan to communicate through GroupMe and share resources via GitHub.*

[*https://github.com/oteomamo/GrindChat*](https://github.com/oteomamo/GrindChat)