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1. Revision History

Version	Date	A/D/C (Add, Delete, Change)	Author	Document Section #	Description
1	10/27/2021	add	vanessa li		
1	11/11/2021	add	vanessa li		
2	11/26/2021	Update	Vanessa Li		

2. Introduction

This document aims to provide an overview of software requirements for the Creative Ideation capstone project. It will present multiple models describing the business requirements, use-cases, system and domain details of this application. The document will ensure the engineering specifications within this project is properly demonstrated and understood to all team members.

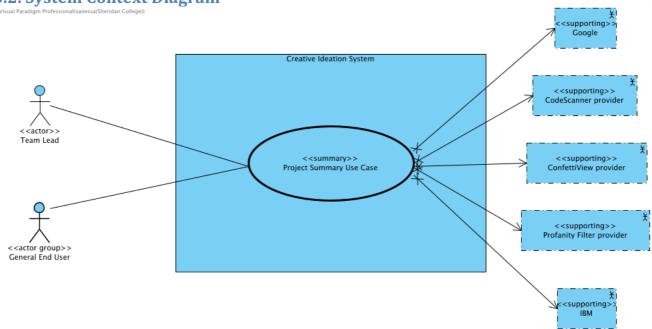
3. System Overview

This section will provide a list of actors with their description, a high level overview of the systems application and functional areas and their use cases.

3.1. Actors

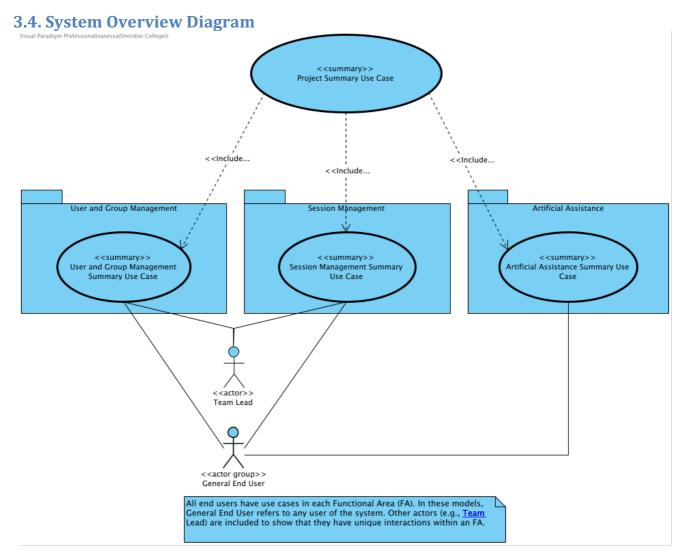
Actor	Description
Admin	Is considered to be the organizer of
	a team, group or activity session. An admin will have
	administration privileges within the application.
General End User	Can refer to any user of the application that belongs to
	a team or group and participates in a
	brainstorming session.

3.2. System Context Diagram



This diagram defines the boundaries and scope of the system as a whole. The entities in this diagram here are labeled as actors. Here we have two actors, admin and general end users, that are expected to be main users within this system. The system will also have supporting entities that play an integral role in the functionality of this application.

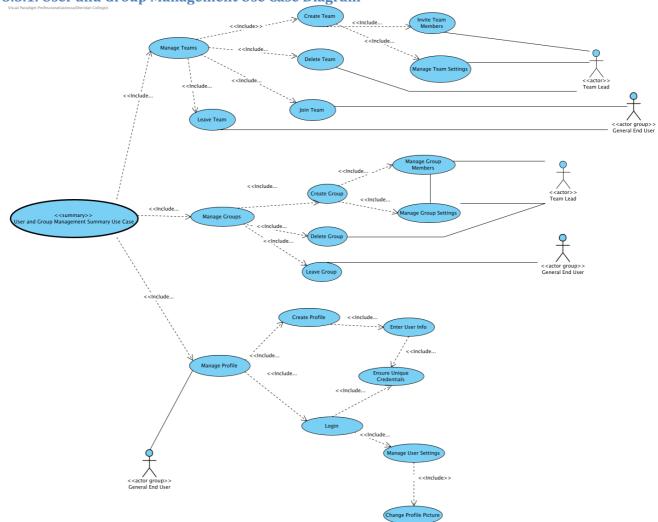
3.3. Overall Use-case diagram



This is an overall use case diagram that highlights the three main functional areas available within this application: User and Group Management, Session Management and Artificial Assistance.

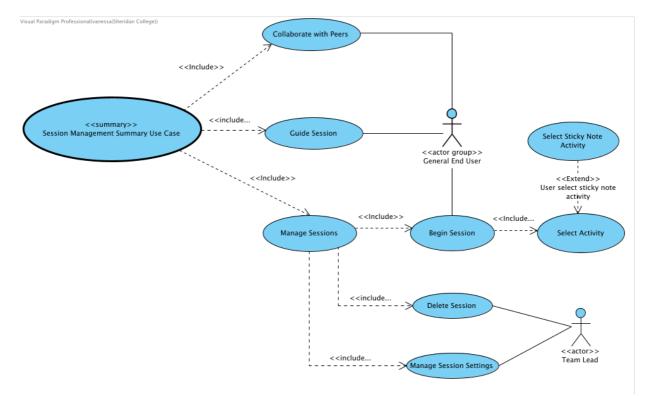
3.5. Functional Areas

3.5.1. User and Group Management Use Case Diagram



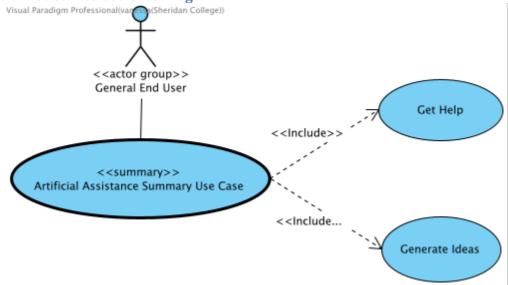
The User and Group Management Functional Area demonstrates how Admin users and General End users interact with the system. This diagram shows all the possible use cases available within the system. Admin users have additional administration privileges that differ from general end users such as manage team/ group settings.

3.5.2. Session Management Use Case Diagram



The Session Management Functional Area focuses on the available functionality that are available to the General End User and Admin when participating in a session. General end users are able to collaborate with peers and Admin's have the ability to guide and mange sessions and activities. "Select Sticky Note Activity" is the main activity option offered in this application.

3.5.3. Artificial Assistance Use Case Diagram



The Artificial Assistance Functional Area shows how the application can provide help to users in a brainstorming session. General End Users can utilize the AI feature within the application to help generate new ideas when feeling stuck within a activity session.

4. System Glossary

Term	Definition	
Team	Can refer to a collection of individuals who belong to	
	the same high-level domain. For instance, the Mobile	
	Computing program and all the students/faculty would	
	be considered a Team in the context of this	
	project. Teams can be decomposed into groups, which	
	are subsets of the team for specific purposes. Following	
	with the previous example, a group within the Mobile	
	Computing team would be Capstone groups.	
ldeate	Refers to the process of coming up with	
	ideas. Ideation is a general term.	
Session	Refers to an active collaborative workspace where	
	users can interact with the whiteboard interface in real	
	time. This is not to be confused with Activities, which is	
	a sub-type of Sessions.	
Activity	An Activity refers to the type of ideation strategy used	
	in a Session. It defines the flow of the ideation session,	
	and what tools will be available to users. A Session may	
	only have one Activity type. An example of	
	an Activity is Sticky-Notes, Brainstorming, Brainwriting,	
	etc.	
Group	Refers to subsets of a team. Groups are smaller	
	collections of individuals with a more specific goal in	
	mind when compared to that of the team as a whole.	
CPS	Refers to the Creative Problem Solving (CPS) process	
	based on the Osborn-Parnes model developed in the	
	1950's. This process has been nurtured and elaborated	
	on by SUNY Buffalo State and the Creative Education	
	Foundation. The tools and strategies defined by this	
	framework inspired this project - however, many are	
	protected by copyright, so we must tread carefully.	
CPS Strategy	One of many tools or strategies that are inherited from	
	the CPS model. This could include strategies such as	
	brainwriting, 'post-its' strategy, etc.	
Basic ideation Strategy	Refers to a method of ideating. This could include	
	ideating with sticky-notes, using a whiteboard,	
	organizing ideas in a certain way, brainstorming, etc.	

5. Business Requirements

5.1. System Business Requirements

Business Requirements	Description
1,7,5	As an Admin I want to avoid copyrighted terms such as "Creative Problem Solving" in the application
	As an Admin I want to ensure that my activity session is slur free.

6. User Requirements Summary

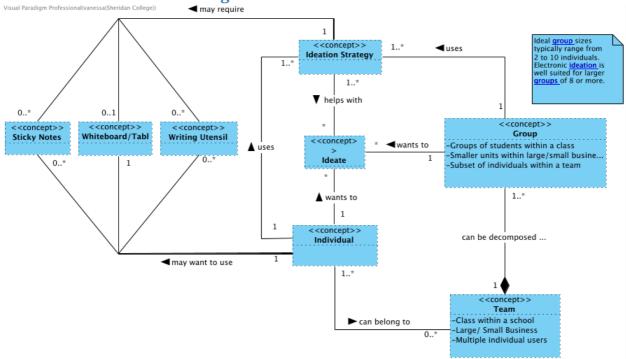
6.1. Use-Case Table

Use Case	Description	Author
Create Group	As a general end user i	Vanessa Li
	want to be able to create	
	a group for brainstorming	
	topics	
Create Profile	A user can create their	Vanessa Li
	profile by entering a	
	unique username and e-	
	mail, and a password	
Create Team	As a general end user i	Vanessa Li
	want to be able to create	
	a team.	
 Delete Team	As a general end user i	Vanessa Li
	want to be able to delete	
	a team	
 Join Team	As a general end user i	Vanessa Li
	want to be able to join	
	a team	
Login	As a general end user i	Vanessa Li
	want to be able to enter	
	my username and	
	password and login to the	
	арр	
Manage Groups	As a general end user i	Kell Evoy
	want to be able to manage	
	my groups and see	
	which groups i belong to.	
 Manage Profile	As a general end user i	Kell Evoy
	want to be able to manage	
	my profile by updating my	
	email address, name and	
	password.	
Manage Teams	As a general end user i	Matt Marini
	want to be able to manage	
	my team by being able to	
	create, delete, leave and	
	join a team.	
 Manage User Settings	As a general end user i	Matt Marini
	want to be able to manage	
	my team by being able to	

	T	
	create, delete, leave and	
	join a team.	
Select Sticky Note Activity	System prompts user the	Matt Marini
	select sticky note activity	
Select Activity	System presents a list	Matt Marini
	of activities that can be	
	used in their group session	
Manage Session	System prompts user with	Matt Marini
	control settings such as	
	profanity filter	
Collaborate with Peers	System presents the user	Matt Marini
	options to collaborate with	
	peers	
Generate Ideas	As a user, I'd like to receive	Kell Evoy
	recommendations for new	
	ideas related to the ones	
	that have been entered on	
	screen.	
Provide Help	As a student or teacher, I	Kell Evoy
	want to have easy access	
	to information of how the	
	app works, how to navigate	
	the app, how to get	
	started, and what to do	
	when I get stuck.	

7. Domain Overview

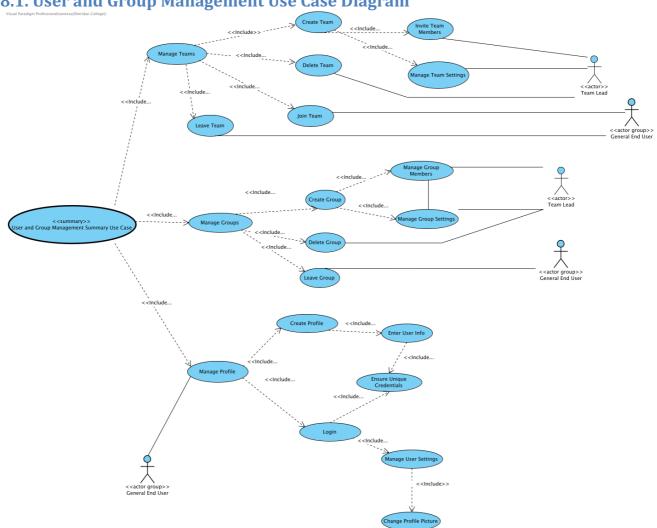
7.1. Domain Model Class Diagram



The Domain Model Class Diagram defines the domain in which our target problem exists, this diagram shows displays all the relationships between concepts within the application.

8. Use-Cases

8.1. User and Group Management Use Case Diagram



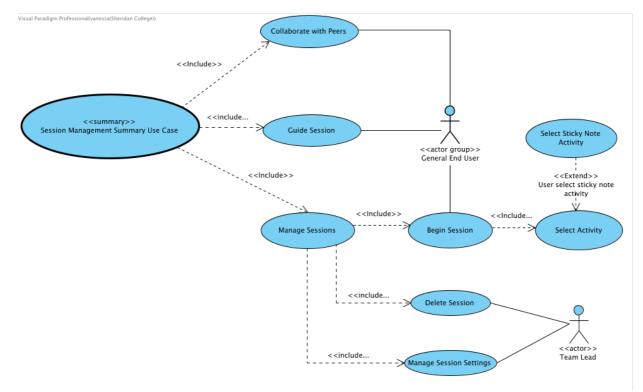
The User and Group Management Functional Area demonstrates how Admin users and General End users interact with the system. This diagram shows all the possible use cases available within the system. Admin users have additional administration privileges that differ from general end users such as manage team/ group settings.

● 8.2. User and Group Management Summary Use Case

ID: UC02

Users can create and login to accounts with unique credentials. Once logged in, users are able to set their preferences and manage their groups, choosing to create, join, or leave groups as necessary

8.3. Session Management Use Case Diagram



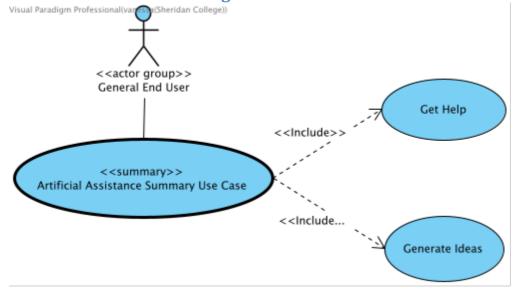
The Session Management Functional Area focuses on the available functionality that are available to the General End User and Admin when participating in a session. General end users are able to collaborate with peers and Admin's have the ability to guide and mange sessions and activities. "Select Sticky Note Activity" is the main activity option offered in this application.

8.4. Session Management Summary Use Case

ID: UC03

Users can participate in sessions within teams and groups they belong to. In those sessions they are able to participate in sticky note activity and collaborate with their peers. Admin's are able to manage session settings where they are able to control and see profanity data usage in session settings.

8.5. Artificial Assistance Use Case Diagram



The Artificial Assistance Functional Area shows how the application can provide help to users in a brainstorming session. General End Users can utilize the AI feature within the application to help generate new ideas when feeling stuck within a activity session.

■ 8.6. Artificial Assistance Summary Use Case

ID: UC04

Users will have access to various tools and functionalities enabled by AI and Cognitive Computing. These tools will be accessible to all end users. The most prominent feature in this functional area is the Generate Ideas tool, which will exist as a small button in most activities that users can tap, and a relevant idea suggestion will be presented to them.