Primary

- <u>Admins</u>: A user that manages the system, such as managing user accounts and analogies. Their main focus is to prevent bot/spam accounts from creating mass analogies and regulating inappropriate analogies and notes. Admins should not necessarily have expertise in computer science topics, but definitely be technologically-literate.
 - Onion model role and level: System Maintenance operator
- <u>Instructional staff</u>: Any level of college or grade-school teacher who may have an interest in teaching students computer science or principles associated with computer science. The instructors should have expertise in computer science topics.
- Onion model role and level: System Normal Operator/Functional Beneficiary
 <u>Graduate & Undergraduate teacher assistants</u>: Any teacher assistant, regardless of graduate or undergraduate status, who needs to explain computer science principles to computer science students. The assistants should have expertise or have a deep understanding of computer science topics.
- Onion model role and level: **System Normal Operator/Functional Beneficiary** <u>Dr. Brianna Bettin (Client/Admin)</u>: As the client of the application, Dr Bettin will make sure that all her needs and requirements are met. Dr. Bettin should have expertise in
 - computer science topics.
 - Onion model role and level: System Maintenance operator
- <u>Us (Developers)</u>: As the developers of the app, we have an interest in making sure that it
 meets the needs of our scientist and provides a great user experience.. The developers
 should have a high level of knowledge in computer science principles and design.
 - Onion model role and level: Wider Environment Developer

Secondary

- <u>Students</u>: Any college student (both undergraduate and graduate) that is interested in clarifying any uncertainty regarding a computer science concept. Students can range from computer science knowledge, ranging from beginner to advanced.
 - Onion model role and level: **System Normal Operator**