**Assignment #3 – Team Contract and Individual Capstone Assessment**

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**Introduction**  
My senior design project is centered around the development of a social media app for pets, with a focus on fostering and adoption tracking, as well as ethical breeding verification. As someone who has fostered animals and has a dog at home, I was inspired to create a platform that allows foster parents and breeders to keep connected with the pets they care for. From a technical perspective, this project will integrate user authentication, media sharing, and data management systems, offering an intuitive experience for both foster parents and potential adopters. My goal is to combine my knowledge of software engineering, database management, and ethical design to deliver a product that addresses real-world problems faced by animal lovers.

**College Curriculum and Technical Preparation**  
Throughout my computer science curriculum, I have acquired a range of technical skills that will directly impact my senior design project. Courses such as *Introduction to Programming Languages* introduced me to object-oriented programming, which will be critical in building modular, reusable components of the app. Additionally, *Data Structures and Algorithms* equipped me with the problem-solving skills needed to create efficient data management systems for storing pet information, including family trees for ethical breeding verification. *CS 301: Information Systems* gave me a solid foundation in database management and SQL, which I will use to manage user profiles and pet records. These courses, combined with *Software Engineering*, where I learned the importance of agile methodologies, will guide my team to iteratively develop, test, and improve the platform as we progress.

**Co-op Experience and Professional Development**  
My co-op experiences have also been instrumental in shaping my ability to deliver on this project. During my time as a software development intern at *INL*, I worked on developing creating websites and creating digital twins of power plants, which provided hands-on experience with frameworks such as React Native and Tailwind CSS. These tools will be crucial in the development of the mobile app for the pet platform. I worked on that for about 3 months until I shifted a little more towards the cloud side, I was working on API calls and making sure the website is communicating with the database with using postman which is an external tool which allows you to give calls to the database and pull information.

**Motivation and Personal Excitement**  
I am deeply motivated to work on this project because it bridges my passion for technology with my love for animals. Having fostered multiple pets, I know firsthand the emotional bond that forms, and I believe this app can strengthen those connections, even after adoption. Additionally, the ethical breeding feature could have a profound impact on reducing fraudulent breeders and promoting responsible pet ownership. The chance to create a tool that helps foster parents, adopters, and breeders manage pet care in a transparent and ethical way excites me, as it combines innovation with meaningful social impact. When I got my dog, I was so invested and now I want to do something back.

**Preliminary Approach and Self-Evaluation**  
My preliminary approach to designing the solution involves breaking the project down into key components: user registration, pet profile management, media sharing, and the ethical verification system. We will begin with a detailed requirements analysis, followed by wireframing the user interface, and then proceed to backend development. My team and I plan to use an agile approach, with frequent testing and iterations to refine features based on feedback. I expect the final product to be a user-friendly and scalable app that fosters engagement among pet owners and potential adopters. To self-evaluate my contributions, I will set clear milestones for each development phase and ensure that I meet deadlines with quality output. A successful outcome will be a fully functional, well-received app with a growing user base, indicating that I have achieved my goals.