North Star Sharing

Team Roster

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Summary and Aim

At North Star Sharing, we aim to bring the furthest reaches of the vast riches from outer space within reach one picture at a time! Whether you love to capture beautiful long exposure photos of the night sky or the highly technical imagines produced by telescopes like The Giant Magellan Telescope, we've got you covered. Easily share the captivating imagines you take alongside with the celestial coordinates to a community of fellow gazers! Explore other members' photos and find them for yourself with the attached coordinates and help from your phone to point you in the right direction.

The topic of this app was chosen because the members of our team share a love of science, particularly the exploration of outer space. We felt that there was a niche opportunity with hobby astronomy to share photos and provide a convenient method to search and categorize images by astronomy-related topics. We feel that the most useful feature is discovering an interesting picture that someone else has posted to the app and being able to use the app's features to locate that same celestial body and orient one's camera, no matter how much time has elapsed or where the photographer is standing upon the Earth.

Functionality

After signing in, users will be able to take pictures of celestial objects and attach tags for easy categorization and searching. A user's own pictures will be displayed in a social media-style feed. Users may search for pictures of specific celestial objects from a robust list of available tags. Using a tag, a user may locate a celestial object using their camera, and the app will point them to the correct patch of the night sky. (The heavens await!)

Back End Technology Stack

Ubuntu 18.4 - Linux Sever Host	
Apache Tomcat - Java SE 11 Application	
RESTful Web Service	
Apache Derby - Database Hibernate - Object Relational Mapping Spring Boot - Data	
Spring: Model-View-Controller - Service Controllers	
Jackson: JavaScript Object Notation - View Building	
Google OAuth - Authentication	
Front End Technology Stack	
Linux Kernel	
Android SDK 28 - Java SE 1.8	
SQlite - Data Model	
SQlite - Database Room - Object Relational Mapping	
SQlite and Room: Model-View-ViewModel-Controller - Service Classes	
Google OAuth - Authentication	