It sounds like the intern will have a diverse set of responsibilities spanning both front-end and back-end development. Here's a breakdown of steps they might follow:

Understanding Project Requirements: Work closely with the team to gather project requirements and translate them into user stories. This involves understanding the goals of the project, the target audience, and the specific features that need to be implemented.
Designing RESTful API Endpoints: Utilize Java and a framework like Spring Boot to design and implement RESTful API endpoints. These endpoints will handle HTTP requests from the front-end and interact with the database or other services as necessary. It's important to follow best practices for API design, such as using proper HTTP methods, status codes, and resource naming conventions.
Creating Interactive Front-End Components: Develop interactive and user-friendly front-end components using HTML, CSS, and JavaScript frameworks such as React or Angular. This involves building the user interface based on the design mockups and implementing functionality to handle user interactions.
Integrating Front-End and Back-End Components: Once both the front-end and back-end components are developed, integrate them to create a cohesive and functional web application. This typically involves making HTTP requests from the front-end to the back-end API endpoints to fetch and manipulate data. The intern will need to ensure that data is passed between the front-end and back-end components correctly and handle any errors or edge cases that may arise during integration.
Throughout this process, effective communication and collaboration with the team will be crucial. It's important to regularly update team members on progress, ask for feedback, and address any issues or challenges that arise during development. Additionally, following best practices for coding, documentation, and version control will help ensure the success of the project.