

Wandera Interview Questions - Engineering Team

Notification Centre

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Scenario

The Wandera Gateway sends notifications to Wandera end users in order to notify them of important events that have occurred on the Wandera service. An example of one of these notifications is a 'block notification' indicating the Wandera Gateway has blocked the user from accessing a certain type of content. These notifications are sent as either email or push notifications. Unfortunately, for a number of different reasons including email overload or disabled push notifications, it is easy for the user to miss the notification.

To help address this problem we intend to add a 'Notification Centre' to our existing Wandera mobile app. This will provide the user with a full list of recent notifications.

Your task is to design, develop and deliver to us the production ready backend service that will underpin the Notification Centre. This service will be called the Notification Service. The product team have produced a set of functional requirements for the Notification Centre from which the behaviour of the Notification Service can be derived. The Notification Service will also need to meet our standard non-functional requirements.

Please bear in mind the following when completing this task:

- The finished task should be submitted by email as a zip attachment.
- The project should use maven to manage dependencies and build the project. Any publically available libraries may be used.
- The zip file should contain a readme.txt file explaining how to start the service and any information you think is relevant to your solution including a description of your API.
- The target platform should be Java 6 or above.

Good luck!

Functional specification for the Notification Centre

The in-app Notification Centre must:

1. Display a user's list of recent notifications, ordered by notification date and grouped by type.
2. Display a detailed view to inspect an individual notification
3. Display whether the notification has been read or not

4. Provide a means of marking a notification as read
5. Provide a means to delete notifications

Non-functional requirements

1. The service must be built using the dropwizard framework (<http://dropwizard.codahale.com/>)
2. The service should provide a set of RESTful JSON based APIs
3. The code should be 'enterprise ready'
4. The service should use the accompanying csv as the primary data source, which can be loaded into memory. Feel free to generate additional test data based according to the same scheme if it helps.
5. Don't introduce any 3rd party dependencies outside of DropWizard (i.e. please focus on building the core business logic, rather than incorporating additional technologies)
6. Don't introduce a database to hold the notifications data (not even in memory such as H2)
7. Don't introduce Spring