

### **Implementation changes from design?**

1. Augmented check access to check if user is admin and password is admin. In this case user is granted permission of super user and can perform any task in the mobile store application.
2. Changed implementation of restricted methods in product API and collection API to incorporate access token.
3. Used an additional map to store mapping between user name (login) and user id.
4. Other than above mentioned points my implementation complies with the design.

### **How could the design have been better, clearer, or made the implementation easier?**

Add user and add credentials are two separate interfaces. So it may be possible that there may be no credentials for few users. A user without credential defies the business logic of the authentication service. In my opinion combining the two interfaces into one is a good idea.

Admin user leaves security hole in the service. A more careful and secured design is recommended to implement administrator tasks.

### **Did the design review help improve your design?**

Review was very helpful. Hemant Bajpai is my reviewer and we discussed various use cases to understand authentication service and how it fits into the whole system of mobile store application. Reviews and discussions were very helpful in understanding the requirements and analyzing the design and solution.

### **Comments from peer design review?**

- Add admin user to perform super user tasks.
- Add an API in authentication service interface to print information about various types of service objects (user, roles, permissions etc.).
- Class hierarchy, relationships and associations between classes are good.