

Task :

Build a simple User Management module where users can be created, searched, and filtered using RxJS, Observables, and Angular validations.

Features to Implement:

User Form (Reactive Form)

- Fields: Username, Email, Password, Confirm Password, Role
- Validations:
 - o Required fields
 - o Email pattern
 - o Password strength: min length, number, symbol
 - o Confirm Password matches Password
 - o Custom Validator: Username cannot include banned words (e.g., "admin", "root")

Live Search with RxJS Debounce

- A search bar to filter users from a dummy user list (you can use a static array)

- Filter based on username or role

User List with Observable Source

- Store users in a BehaviorSubject<User[]>
- On form submission, push new user into the stream
- List updates dynamically when a user is added

Optional

- Add a role dropdown (Admin/User/Guest)
- Filter users by role using RxJS combineLatest
- Toast or snackbar for "User Added"