User Management API Documentation

Base URL: /api/users

Authentication Endpoints

```
Register User
POST /register
Creates a new user account.
Request Body:
  "username": "string",
  "firstName": "string",
  "secondName": "string",
  "password": "string",
  "email": "string",
  "primaryLocation": "string",
  "role": "string",
  "privileges": "string"
}
Response: 201 Created
  "id": "long",
  "username": "string",
  "firstName": "string",
  "secondName": "string",
  "email": "string",
  "primaryLocation": "string",
  "secondaryLocation": "string",
  "phoneNumber": "string",
  "role": "string",
  "privileges": "string",
  "createdAt": "datetime"
}
Login
POST /login
Authenticates a user.
Request Body:
  "username": "string",
```

```
"password": "string"
Responses: - 200 OK: "Login successful" - 401 Unauthorized: Error message
User Management Endpoints
Update User
PUT /{id}
Updates an existing user's information.
Request Body:
  "email": "string",
  "primaryLocation": "string",
  "secondaryLocation": "string",
  "phoneNumber": "string",
  "role": "string",
  "privileges": "string"
}
Response: 200 OK
  "id": "long",
  "username": "string",
  // ... (same as registration response)
Delete User
DELETE /delete
Deletes a user account.
Request Body:
  "username": "string",
  "password": "string"
Responses: - 204 No Content: User deleted successfully - 404 Not Found:
Error message
Validate User Access
```

GET /{id}/validate

Validates user access privileges.

Parameters: - id (path): User ID - required_access (query): Required access level

Responses: - 200 OK: "Access granted" - 403 Forbidden: "Access denied" - 404 Not Found: "User not found" - 500 Internal Server Error: "An error occurred"

Search and Filter Endpoints

Find by Username

```
GET /username/{username}
Response: 200 OK
{
    "id": "long",
    "username": "string",
    // ... (same as registration response)
}
```

Find by Role

GET /role/{role}

Response: 200 OK Array of user objects

Find by Privileges

GET /privileges/{privileges}

Response: 200 OK Array of user objects

Find by Email

GET /email/{email}

Response: 200 OK Array of user objects

Find by Primary Location

GET /primary-location/{primaryLocation}

Response: 200 OK Array of user objects

Find by Secondary Location

GET /secondary-location/{secondaryLocation}

Response: 200 OK Array of user objects

Find by Role and Privileges

```
GET /role/{role}/privileges/{privileges}
```

Response: 200 OK Array of user objects

Search Users

```
GET /search/{searchTerm}
```

Performs a general search across user data.

Response: 200 OK Array of user objects

Error Responses

All endpoints may return the following error responses:

- 400 Bad Request: Invalid request parameters or body
- 401 Unauthorized: Authentication required or failed
- 403 Forbidden: Insufficient permissions
- 404 Not Found: Resource not found
- 500 Internal Server Error: Server-side error

Data Models

UserRegistrationRequest

```
{
  "username": "string",
  "firstName": "string",
  "secondName": "string",
  "password": "string",
  "email": "string",
  "primaryLocation": "string",
  "role": "string",
  "privileges": "string"
}

UserUpdateRequest
{
```

```
"email": "string",
"primaryLocation": "string",
"secondaryLocation": "string",
"phoneNumber": "string",
"role": "string",
"privileges": "string"
}
```

${\bf User Response}$

```
{
  "id": "long",
  "username": "string",
"firstName": "string",
  "secondName": "string",
  "email": "string",
  "primaryLocation": "string",
  "secondaryLocation": "string",
  "phoneNumber": "string",
  "role": "string",
  "privileges": "string",
  "createdAt": "datetime"
}
{\bf Login Request}
  "username": "string",
  "password": "string"
}
```