

# CS472 WAP Final Project

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This is a team-based project, 3 ~ 5 students as a group.

## *iTravel Final Project specifications and requirements:*

When you first visit your web application, you will be prompted with a screen to login or create a new profile.

There are hardcoded admin accounts. Admin can use the same login page or different login page to login in the system. For admin user, after login, it should redirect to Admin Control Panel Page.

Profile should include the following data: (Full Name, Gender, State, City, Street, Zip code, Birth Year, Email, Password). Email and password here are used for login. If Email already exists in database, display error messages to user using AJAX.

Password complexity should be at least 6 letters and have at least one capital letter, one small letter, one number (use RegEx).

Users should be able to update their profile information.

Users can deactivate their accounts, once an user's account is deactivated, cannot login. Admin can activate any user.

When users finish the sign up process they should be logged in automatically.

Display error message if login fails. If user fails login in consecutive tries 3 times within 10 minutes, the account is automatically deactivated. User should be able to send request to Admin to request activation.

After login, users can search based on posts and travelers' info. The searched results must be paginated, the pagination must be real pagination, NOT using javascript library to implement it.

Users can follow and unfollow other travelers.

After login, users will see the latest 10 posts from the followed travelers sorted by date (latest post is first).

A automatic infinite scroll pagination should be implemented: so when you scroll down the next 10 posts will fade-in using AJAX.

Every user should be able to add a new text post to the application wall. There should be an option for users to delete their own posts using AJAX.

Posts can be moments which mean you can upload one [or more] images with messages you'd like to say. It also can be your travel plans. By default, all posts use current location. If couldn't get current location, use profile's address. People should be link to Google map to view the scene when click on this moment.

User can choose to notify followings when make a post. If choose to notify, all the followings will receive a notification, when click the notification, the new post will display in current user's panel without needing to refresh the page.

Users should be able to like/dislike a post(display how many people like the posts), read all previous comments and add/delete/update a new comment using AJAX.

The application will provide a weather service to help users plan their travels. A link should be located in the Navigation bar for the weather service.

The weather service will display two things (Current weather map, 5 days/3 hour forecast data) based on their city/zip code in their profile, if missing the app should read their current GPS location.

When admin logs in, in the admin panel,

- 1) List all deactivated users using pagination[not using JavaScript library], provide a way to activate the user.
- 2) Provide a way to CRUD filtering words. The filtering words are used to filter posts. In user's posts, if message contains any filtering word will be considered as an unhealthy post, the post isn't live in following user's panel. Filtering words must be listed using pagination[not using JavaScript library].
- 3) Admin can live any unhealthy post.

### *Technical information:*

1. Google Map: it supports many language, please use javascript version  
<https://developers.google.com/maps/documentation/javascript/>

2. Weather info

You can retrieve map information from openweathermap.org API, you will have to integrate the data coming from the service API with Google Maps. First you will need to sign up for a free account and get an API token that will allow you to query their services.

3. For saving data, you can choose any technique you like. You can just use Java Collections as in-memory database.

### *Important notes:*

1. You must use MVC architecture.
  - Servlets as Controller
  - POJO as Model
  - JSP as View
2. You must use Ajax (jQuery) to perform posting and commenting... etc
3. You must use JSON parser and retrieve all your map data as JSON.

## Submission

1. The projects are due on Thursday Nov 19. One group only submit one copy, collect all your teams' docs in one file and submit.
2. The Group report should be a well formatted Word document including:
  - Link to code on GitHub (or attach a zip file of your project to the Sakai assignment)
  - Detailed Instructions – I should be able to follow your instructions to setup your project on my laptop. I only install intellij + tomcat in my laptop. If you use eclipse, you have to list steps how to setup.
    - This section is very important for a good grade.
3. Individual Report should be a well formatted Word document including:
  - Conclusion covering lessons learned including what was interesting, revealing, difficulty, would do differently in future, etc.
    - This section is very important for a good grade.
  - Show some pieces of code you wrote and you're really proud of that.
  - Show some screenshots of the project you think they're great.
4. The Project submission is a group submission, which mean 1 group only 1 member submit the project. The member who is in charge of it must collect other team members' report and wrap them together to submit.
5. Any plagiarism is detected will result in NC or NP.

**Good luck and happy coding!**

Tasks	Assigned To
Register user with proper error handling	
Register successfully automatically logins in	
Update user's profile with proper error handling	
Deactivate user	
Regular user login	
User login failed 3 times, deactivate automatically	
Search by post - pagination	
Search by user - pagination	
Display 10 followed travelers posts sorted by date desc	
automatic infinite scroll pagination by ajax	
Make a new post	
Delete own post by ajax	
Post with photos, location	
Post with notification	
Click notification, display posts	
Display how many people like the post	
Like/display posts by ajax	
Display comments by ajax	
Add new comments by ajax	
Delete own comments by ajax	
Weather service	
Admin:	
Login	
Deactivated user's list - Pagination	
Activate user	
CURD filtering words – pagination on read	
Unhealthy post list	
Live unhealthy posts	
General	
Look-and-feel (consistency)	
Form validations and error messages	
404 Page	
500 Page	
Database setup	