# Web Interfaces graded exercise

You grade on the course will be based on this exercise. The exercise can be done either solo or in team of two persons.

This exercise will be done in cooperation with the Hybrid Application Development course. In that course you will develop a client application for your API.

## Topic

You are to implement a web application which primary function is to serve as a platform for selling and buying used items. An example of this in Finland would be Tori.fi or globally ebay.com.

In this exercise you must focus on the API implementation.

Functional requirements for the web application

* User registration and login
* User should be able to create new items to sell – a posting. Posting should contain the following information
  + Title
  + Description
  + Category (clothing, cars etc.)
  + Location (city, county etc.)
  + Images (max 4)
  + Asking price
  + Date of posting
  + Delivery type:
    - Shipping
    - Pickup
  + Seller’s name and contact information
* User should be able to modify his postings
* User should be able to delete his posting
* All users (logged and non-logged) should be able to search and list postings based on
  + Category
  + Location
  + Date of posting

Deliverables

API Design document, source code and running application in the cloud. Notice that you should have testing code for your implementation as well. No tests is a negative factor. Same for API Design document.

You must deliver the source code of your application as a link to public github repository. In the repository there must be roughly equal amount of commits/contributions from all the team members if all team members wish to get equal grade. Remember to commit and push often. Having only single commit of the whole work will affect negatively to the grades.

Running application must be available in the public internet.

Return & schedule

Return process will be handled via moodle workshop available at course moodle site. The workshop will be configured so that everybody who returns a work will also be required to review and grade three other works. The review order will be randomized. Conducting the review is a requirement to pass the course.

Deadline on returning the work is on Thursday 27.2. at 23.59. The review phase will begin immediately after that and must be completed by the latest on Sunday 8.3. at 23.59.

No returns are accepted after the deadlines. If you cannot finish the application in time, then return it unfinished. That way you can still get a grade, just not the maximum 5.

Additionally when you return your work you must reserve a meeting with the teacher via email. In the meeting all team members must be present. The team will present the application, explain how it has been implemented and what were the responsibilities of the team members.

Notice that you should reserve the meeting well in advance. Do not expect to get a guaranteed delivery time for example the day before.

## Grading

Maximum points from this exercise is 20p.

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| **Feature scoring** |  |
| User login system which authenticates and authorizes users to access the system. | HTTP Basic 2 points  JWT 4 points  OAuth 6 points |
| User should be able to create new items to sell | 6 |
| User should be able to modify his postings | 2 |
| User should be able to delete his posting | 2 |
| All users (logged and non-logged) should be able to search and list postings | 4 |
| API is deployed to public internet | 2 |

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| **Negative factors** |
| Messy code (indentations, code in one or only few large files) |
| No testing files present |
| No API Design documentation available |
| Bad use of version control - one or very few commits |

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| **Points** | **Grade** |
| 17 | 5 |
| 14 | 4 |
| 11 | 3 |
| 8 | 2 |
| 5 | 1 |