



Project Address Book

- You should submit **whole java project file in zipped format** and **project report**, named project file as *studentNo_NameSurname_Project*.
- Do your homeworks in **ECLIPSE IDE**.
- Do not use Turkish Characters(ç,ğ,ı,ö,ş,ü) for naming project, methods, classes.
- Late submissions are not allowed.
- Group working is allowed. Indicate all project members in the report. Each member of project should upload project file and report to Classroom.
- Copy homework will be evaluated as 0.
- **DO NOT upload a screenshot or something else.**
- Use Google Classroom for your questions. Do not send private messages.

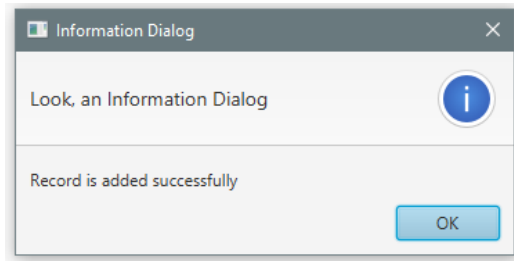
Problem Description:

The screenshot shows the 'Address Book' application window. It contains several text input fields for 'ID', 'Name', 'Street', 'City', 'Gender', and 'Zip'. The 'ID' field is set to '1'. The 'Name' field is 'Merve', 'Street' is 'Adnan Menderes', 'City' is 'Aydın', 'Gender' is 'F', and 'Zip' is '1234'. Below the fields are several buttons: 'Add', 'First' (highlighted with a blue border), 'Next', 'Previous', 'Last', 'UpdateByID', 'SearchByID', and 'Clean textFields'.

The screenshot shows the 'Address Book' application window after a search. The 'ID' field is now '3' and the 'Search/Update ID' field also contains '3'. The 'Name' field is 'Ahmet', 'Street' is 'Efekent', 'City' is 'Aydın', 'Gender' is 'M', and 'Zip' is '09010'. The 'SearchByID' button is now highlighted with a blue border.

ADNAN MENDERES UNIVERSITY
CSE 203 Object-Oriented Programming

Alert:



1- Write a java program that stores, retrieves, adds, updates and search addresses as shown in figure. Use a fixed-length string for storing each attribute in the address. Use **random access file(.dat) or text file (.txt)** for reading and writing an address. Assume that the size of id, name, street, city, gender, and zip is 4, 32, 32, 20, 1, 5 characters, respectively.

- Program should perform **add, first, next, previous, last, updateById, SearchById, CleanTextFields** operations.
- ID text field should be “read only” and **id** should be set in the code for each record, do not take from user.
- Use **Search/Update ID text Field** as input for **UpdateById** and **SearchById** buttons.
- Create **Person class**. Data fields are: ID, name, street, city, zip, gender. Create constructor, getters and setters.
- When program starts, read all records from random access file or text file and save each record in **Person []**. (Person array)
- Update both **Person[]** and **random access file or text file** when **add** and **update** operations happen.
- Use **Person[]** for **first, next, previous, last, searchById** operations, do not use random access file.
- Create **Alert** when new record added successfully. You may add some controls (like: alert) in situations like: pressing “**next**” button when viewing last record, pressing “**previous**” button when viewing first record.

2- Submit a report (word) file that explains following questions with a cover page that contains your name and number. **In the report:**

- Describe the problem including major steps, functions for solving the problem and input/output in your own words.
- Draw the UML diagram of your code.
- Describe how you test this program.