

Web Application and Services: Coursework

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Module: G6060/944G5 | Web Applications and Services

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Disclaimer: I user **PASSWORD** instead of **USERPASSWORD** for the Realm

Web layer

Users should be able to:

- View all their transactions : **Completed**
- Make direct payments to other registered users : **Completed**
- Request payments from registered users : **Completed**

Administrators should be able to see:

- User accounts : **Completed**
- All payment transactions : **Completed**
- Register new administrators : **Completed**

Mark Allocation:

- All required .xhtml are written and correctly connected with CDI backing beans : **Completed**
- The set of correctly implemented JSF pages includes .xhtml pages required to perform security-related actions : **Completed**
- Conversions and validations : **Completed**
- Explicitly specifying navigation rules in a faces-config.xml file : **Completed**

Business Layer

Include appropriate annotations for supporting JTA transactions : **Completed**

Users should be able to (15%):

- View all their transactions : **Completed**
- Make direct payments to other registered users : **Completed**
- Request payments from registered users : **Completed**

Administrators should be able to (5%):

- View all user accounts and balances : **Completed**
- View all payment transactions : **Completed**
- Register more administrators : **Completed**

Persistence Layer

- All access to application data is handled through JPA Entities : **Completed**
- A correctly configured persistence.xml file along with annotations for defining JPA entities : **Completed**
- Annotations are required to define associations among different entities wherever this is required : **Completed**

Security Layer

10% - Form-based authentication:

- Full marks will be given if users can register, login and logout : **Completed**
- This can happen using a jdbcRealm : **Completed**
- An admin must be registered in the system when deploying : **Completed**

4% - Declarative security for access control when navigating through .xhtml pages:

- Access to .xhtml pages must be restricted to authorised actors. You need to add security constraints in the deployment descriptor : **Completed**

4% - Declarative security for accessing EJB functionality:

- EJBs must be annotated appropriately so that EJB functionality can be accessed by authorised actors : **Completed**

2% - Initial administration registration:

- Upon deployment, a single administrator account (username: admin1, password:admin1) must be present : **Completed**

- You can implement that through a singleton EJB that is instantiated upon deployment : **Completed**
- Only an administrator can register more administrators through the restricted admin pages : **Completed**

Web Services

10% - Full marks will be given if the REST web service is correctly implemented:

- Service, path:
`baseURL/conversion/{currency1}/{currency2}/{amount_of_currency1}` : **Completed**
- Client : **Completed**

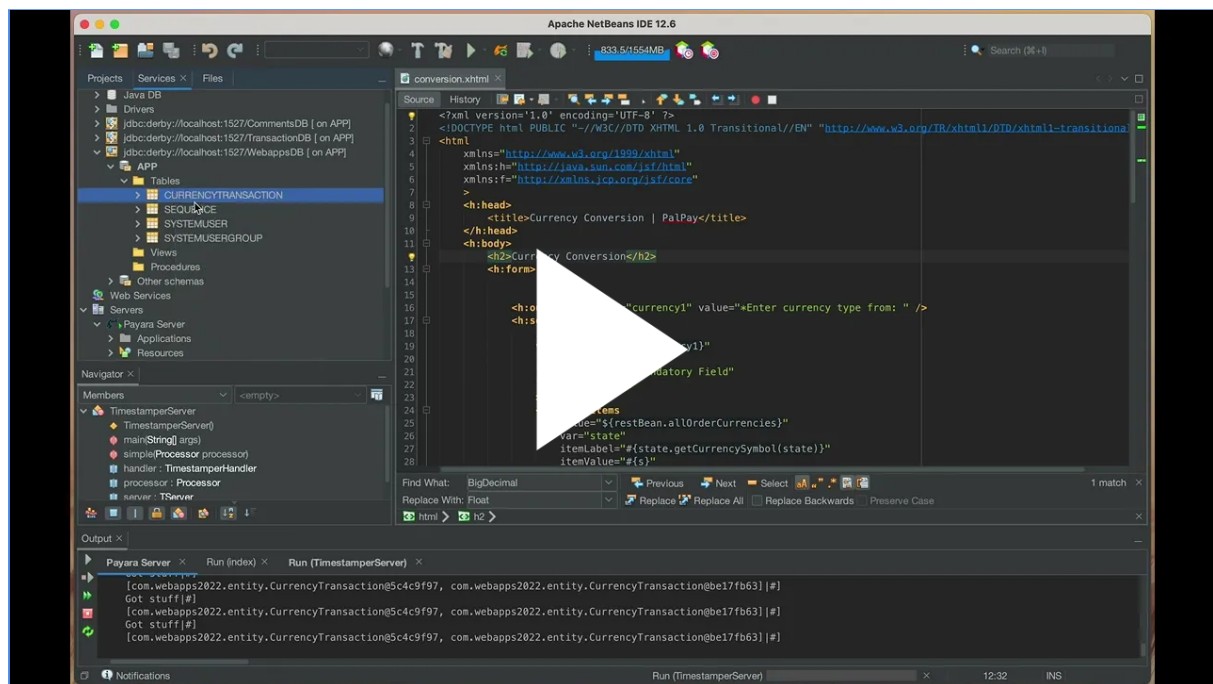
Completed but not applicable to markscheme:

- Created a redirect on project root to the index page. I had to do this as using the default form redirects to the http page which doesn't return or redirect, so I created the redirect myself

Thrift

10% - Full marks will be given if the Thrift timestamp service is correctly implemented as described above : **Completed**, running on port 9090

User Manual Video:



Link if image above doesn't work: <https://www.youtube.com/watch?v=JgVv1a4iSj0>