

FINAL EVALUATION

Distributed Programming

Rules

- There are 2 examination for Final Evaluation
 - Theory Evaluation → to assess the level of remembering and understanding of the TCP, UDP, Database and Webservice Topics
 - Project Evaluation → to assess the level of implementing case study with TCP, UDP, Database and Webservice Protocols using Java
- Examination between 25 Mei 2021 until the day of UAS (21 Juni 2021 23.59)

Theory

- For each week (4,11 June) there are 2 individual evaluation with Quiz module.
 - 3-4 Juni 2021 (08.00 – 23.59) → TCP Multithreading & Databases
 - 10-11 Juni 2021 (08.00 – 23.59) → Webservice, WS + DB & UDP
- Spend time: (only) 30 minutes for each session
- Trial: unlimited
- How to pass this quiz?! You must have minimum score 70.
- How the impact if I can't pass this minimum score? You can't submit join Quiz 2 & Final Report in your Project (that means your UAS = 0)

Project Case Study: House Rental Reservation Systems

- Background Problems:
 - Need of trusted global Information System for booking or rent a house
 - Need of direct conversation or consultation using multimedia (text, audio or video) like as: chat / voice call / video call in Message Platform.
- Scope of Systems:
 - Manage Data Reservation in one Property from “booking” process until the customer left this Property
 - Provide a module/sub-Programme that can direct conversation
 - Must be have a Website to implement “Global Information System”
 - Your system is **implemented for one Property only.**

Project Case Study: House Rental Reservation Systems

- Recommendation for developers:

1. You can make a group that provide 2-3 person
2. To implement reservation, developer make a MySQL Database and make integration with MySQL JDBC for each System
3. You can make a Website with WebApplication in Java and make **Webservices Protocol** to implement booking mechanism.
4. For the chatting and audio/video conferencing you can make different type of project (such as: JavaApplication) and different protocol (such as: TCP/UDP)
5. For chatting or audio/vido conferencing, you can explore from many resources. If you reuse another project from another person, you **must report** it and explain what your modification.

There is some references that you can explore:

- <https://github.com/Imran92/Java-UDP-Video-Stream-Server>
- <https://codeforfun.wordpress.com/2017/06/13/networking-sockets-and-udp-streaming-fun/>
- <https://shiffman.net/processing.org/udp/2010/11/13/streaming-video-with-udp-in-processing/>
- <https://stackoverflow.com/questions/41536542/client-server-based-audio-live-streaming-in-java-using-socket>

Assessment

- Complexity of Webservice Reservation → 20
- Implementation of JSP Public WebPage → 15
- Complexity of Authentication Reservation → 20
- Tele-consultation with Text (with TCP recommendation) → 15
- Tele-Reservation with Text (with TCP recommendation) → 20
- Tele-Consultation with audio/video (with UDP recommendation) → max 20

Total = 100 + (10 bonus) for Group Assessment.

Your UAS score = your Contribution% * Group Assessment

Note: if you want to make Tele-Consultation with audio/video, you must do Tele-Consultation with Text & Webservice first. You can get (max) +10 points if you try this tele-consultation with audio/video. You can get (max) +20 points if you finish tele-consultation with audio/video.

The submission

Submit your Group (max 31 Mei 2021) in ULS. Each of student must take a submission.

- There are 3 phase:
 - First week (until 4 June 2021 09.00) →
 - Submit your ERD
 - Submit your User Interface for each Platform
 - Describe the Implementation of Service or TCP only 2 process (in one report) → with Google Drive
 - Second week (until 11 Juni 2021 09.00) →
 - Submit progress your demonstration video of Website & Webservice about: (1) login, (2) reservation, (3) tracking your reservation (4) and so on. (duration max: 5 minutes)
 - Submit progress your demonstration video of Tele-consultation with Text about: (1) reservation via text; (2) check your reservation (3) and so on. (duration max: 5 minutes)
 - Submit your exploration for tele-consultation with audio and video (duration max: 5 minutes)
- Each video submit with Google Drive

- Final Week (until your deadline of UAS → 21 June 2021 23.59)
 - Video Presentation of your Final project (max. 15 minutes)
(submit in Google Drive)
 - Final Report → submit in ULS.