Description: Session project

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1 PROJECT PROPOSAL (5%)

You must produce a detailed project proposal with the following elements :

1. Main objectives to accomplish
2. Context, project description and use cases
3. Architecture diagram
4. Functional requirements (by component)
5. Distribution of tasks by student and work plan (3-month forecast of deliverable)

2 PROJECT REPORT (6%)

You must produce a detailed project report that will contain the following

1. (10 %) Report presentation
   — Context and project proposal
   — Detailed project specifications
2. (40 %) Analysis and design
   — Use case analysis
   — Characteristics of the architecture
   — Design decisions
   — Class and sequence diagrams
3. (30 %) Implementation
   — Algorithms
   — Passed message structure (if applicable)
   — System requirements
4. (20 %) Validation and verification
   — Testing plan
   — Test results and analysis
   — Recommendations for future improvements

3 IMPLEMENTATION QUALITY (9 %)

Your application will be evaluated on the quality of your implementation. The following criteria will be considered during the evaluation :

— Transparency : modularity of components, encapsulation, use of design patterns
— Performance : system evaluation (e.g. gas cost, latency)
— Scalability according to the project context : modular architecture allowing the addition of new functionalities
— Fault tolerance : errors management, exceptions management , machine and network failures management
— Documentation and communication : code comments, version management (Git, SVN, ...), documentation, *README*

4 PROJECT PRESENTATION (10 %)

You will be asked to present a demonstration of your application on **July 28th** online. This demonstration should last about 15 minutes and should include equal participation from all team members. participation of all team members. During the demonstration, you will be requested to run your application and demonstrate its compliance with the functional requirements. You must also present the results of your evaluation of the system. The audience will ask you questions about your system design and other points covered in your project report, including a review of your test plans.

5 CORRECTION PENALTIES

The following penalties and their values are applicable as follows :

- English mistakes and writing errors : -0.5 % per mistake, maximum 20 mistakes (-10 %)
- Source code documentation (algorithms, javadoc, etc.) : -5 % if insufficient, -10 % if practically non-existent
- Professionalism and quality of the document (incomplete document, unprofessional layout, spoken language, lack of nomenclature, text in first person (singular/plural) (singular/plural)) : up to -10%
- Compilation errors : loss of all points allocated to the correct operation
- Non-justified late submission : automatic and non-negotiable zero score
- Non-compliance with delivery standards : automatic, non-negotiable zero score

6 WRITING AND DELIVERY STANDARDS

- Respect the writing standards contained in the document "Guide to Writing a Project Report, Thesis or Dissertation".
- The electronic submission must contain the enhanced application with all necessary packages.
- Reports should be written in LaTeX, using the official ÉTS template.

7 DEADLINES

— Electronic delivery (project proposal) : May 12 before 11 :59 pm.
— Project presentation : July 28 in class.
— Electronic delivery (source code + electronic report) : n.d.