

**TIES 4911 (2024): Guidelines for the Task 7****Group members (2 person):**

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Study lecture materials... Refer to the examples in the materials to complete following sub-task(s):  
The Task-7 is a group task (group of 2 max).

**Task 7-1: Develop Smart service/app based on Cognitive Services:**

- Study lecture materials as well as more detailed documentation of the cognitive services (IBM Watson, Google, Microsoft and AWS).
- Try out the available demos of Cognitive Services and brainstorm (within your team) about possible applications of them.
- Come up with ideas and “paper prototypes” (presentation slides with drawings and visualizations) of several Apps/Services based on available Cognitive Services. Preferably, think about possible integrations of several services inside the solution. You may choose any domain (e.g. Healthcare, Commerce, SmartEnergy, Transportation, SmartCity, Education, Security, Information Wars, etc.)
- Implement a prototype of one of the elaborated ideas. If applicable, combination of Cognitive Services from different providers (IBM, Google, Microsoft, AWS) is appreciated. You may use either general REST API calls or corresponding SDKs of your favorite programming language for implementation.

Files to include in the task results (archive file [ties4911-task07-\(your\\_group\\_name\).zip](#)):

- *Task7-instructions.doc (this file)*
- *PPT presentation with a set of your solutions:*

*Each solution contains:*

- *Description of idea, problem/issue it helps to resolve, and use-case with graphical prototype of system's GUI (graphical user interface).*
- *Architecture of the solution, including description of all “building blocks” with their inputs and outputs.*
- *Necessary additional actions and use of supportive tools to enable integration of the services.*
- *Possible use of extra tools and services to collect input from a user as well as deliver/represent an output to him/her.*
- *Mention risks due to any limitations or weak points of Cognitive Services with respect to your solution and suggest possible improvement.*

- *source codes*

*Additionally, each student should write (and send separately) individual self-evaluation and specify a level of each group member contribution (distribute 100 points among the group members).*

Send the results as an archive to lecturer (oleksiy . khriyenko @ jyu . fi) before the deadline (end of 04.04.2024).

Results should be present during the Demo-7 Session. Be sure that you have all the necessary adapters to connect your computer in the classroom (if applicable).