SE 216 – SOFTWARE PROJECT MANAGEMENT SOFTWARE MEASUREMENTS DOCUMENT

PROJECT NAME: CodeCraft
GROUP NUMBER and MEMBERS:

Lorin Erol - 20220601086

Başar Kocabaş - 20220601048

Mert Kocyigit -20210601039

Mehmet Taşoğlu - 20210601059

Haktan Yolcu - 20190601050

Efran Ergelen - 20220601029

Questions to identify measurements:

- 1)How much effort did this project require?
- 2)How many hours are spent for each sprint while developing this project?
- 3)How much space does the application take?
- 4)How much of the code has been reused?
- 5) Is the application easy to use?
- 6)How stable does cloud computing work?
- 7)How much effort went to testing
- 8)How much documentation was needed?
- 9)What was the total cost of the project?

Identified measurements:

- 1.1 Total effort for the project.
- 2.1 Number of hours spent on each sprint.
- 3.1 Total space requirement on the installed device.
- 3.2 Total file size distributed to users.
- 4.1 Total hours saved from code reuse.
- 4.2 Total reused code percentage.
- 5.1 Average click number by users for a specific task.
- 5.2 User feedback from all age groups.
- 6.1 Rate of successful connection.
- 6.2 Maximum number of simultaneous connections.
- 7.1 Total effort spent on testing.
- 7.2 Number of errors found during testing.
- 8.1 Documentation effort by staff members.
- 9.1 Total cost of all necessary services.
- 9.2 Number of people involved in the project.

Measurement storage and collection:

1)Effort Required:

- -What: Total effort for the project.-When: After project completion.
- **-Format**: Person-hours or person-days.
- **-How:** Calculating the total amount of work that the team members have done for the project.

2)Development Time per Sprint:

- -What: Hours spent per sprint.-When: At the end of each sprint.
- -Format: Hours.
- **-How:** Tracking time spent on sprint tasks by team members using project management tools.

3)Application Space:

- -What: Total space occupied by the application.
- **-When:** After any updates to the application.
- **-Format:** Megabytes (MB) or gigabytes (GB) or Terabytes(TB) .
- **-How:** Calculating the source file size or size of the distributed application.

4)Code Reuse:

- -What: Percentage of reused code.
- **-When:** After implementing already existing code.

Format: Percentage.

How: Comparing original and reused code to calculate the percentage of reused code.

5)Usability Assessment:

- **-What:** Evaluation of application usability.
- -When: After application testing.
- **-Format:** Qualitative assessment (e.g., user feedback, usability testing results).
- **-How:** Collecting user feedback on the usability of the program and carrying out usability testing.

6) Cloud Computing Stability:

- **-What:** Stability of the cloud system.
- **-When:** After establishing the cloud system for the application.
- -Format: Response data.
- **-How:**Evaluating system responsiveness under various workload conditions in order to assess stability.

7)Testing Effort:

- -What: Effort spent on testing.
- **-When:** Throughout the project development phase.
- -Format: Person-hours or person-days.
- **-How:** Tracking time spent on testing tasks, including test case creation, execution, and debugging.

8)Documentation Requirement:

-What: Amount of documentation needed.

-When: Throughout the project lifecycle.

-Format: Number of documents or pages.

-How: Assessing the documentation needs and creating necessary documents such as design documents, user manuals, etc.

9)Total Project Cost:

-What: Total cost of the project.-When: After project completion.

-Format: Currency (USD).

-How: Summing up all project expenses including salaries, infrastructure costs,

software licenses, etc.

Measurement Type	Description	Example Measurements
Effort	Quantifying the human resources required for the project	-Total person-hours or person-days spent on project tasks
Sprint Hours	Tracking the time spent on each sprint	-The difference between estimated time and real spent time for a sprint.
Application Space	Measurement of how big the product is	-Total file size of the application or its components
Code Reuse	Evaluation of code reuse and effectiveness	-Percentage of code reused, -Total hours saved from code reuse
Usability	Assessment of application's ease of use	-User satisfaction scores -Usability testing results
Cloud Stability	Evaluation of cloud system's stability and reliability	-Maximum number of concurrent users -Rate of successful connections
Testing Effort	Measurement of effort invested in testing activities	-Total person-hours spent on testing tasks
Documentation	Quantifying the amount of documentation needed	-Number of documents or pages created
Cost	Quantifying the financial resources required for the project	-Total cost of all necessary services