SE 216 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE MEASUREMENTS DOCUMENT

PROJECT NAME: SHARPFRİDGE

GROUP NUMBER and MEMBERS: Berkay Işık, Canercan Demir, Kaan Dönmez, Merve Topal, Yağmur Duvan, Yiğit Mora

Questions to identify measurements:

- How much effort did this project require?
- Did the project adhere to its schedule?
- How much of the code has been reused?
- How many changes have occurred?
- What did the team produce in a limited time?
- How good is the product?
- How much effort went into testing?
- How much documentation was needed?

Identified measurements:

Effort:

- Effort is the spent time per person and its numerical representation as percentage.
- It will be calculated via continuous tracking the team throughout the project duration automaticly with a project management tool
- Format: Real number data.

Schedule Adherence:

- Schedule adherence is the variance between planned and actual timeline.
- After each sprint retrospective, estimated time and spent time will be proportioned.
- Format: Percentage of actual timelane and completed timeline

Code Reuse:

- Percentage of code reused from previous projects or libraries.
- It will be calculated after each sprint via comparing git logs by tools and checking used libraries.
- Format: Percentage data.

Change Data:
- Number of changes implemented over time (e.g., weekly or monthly).
- It will be calculated by continuously recording the changes with git logs and comparing it with all estimated features in a certain period of time
- Format: Percentage data

Product Quality:
- Number of defects and their detected severity level during testing.
- It will be calculated in the testing. After that, the severity of bug or defects will be graded.
- Format: Integer data for defects, real number data for satisfaction ratings.

Testing Effort:
- Total hours spent on testing activities and testing hours spent per specific component or feature.
- It will be calculated via automaticly tracking the real time during testing.
- Format: Real number data.

Product Size
- Product size consist of several elements like number of components, related documentation size and actual size of the product in bytes.
- In Daily scrums and sprint reprospectives, size, classes per functionality and related documentation size will be discussed.

Data Management
- Estimated project length and cost will be analyzed. Also, cost, size of the selected tools and estimated test data will be determined before each sprint.

Measurement storage and collection:

Effort, Schedule Adherence, Code Reuse, Change Data,Product Quality, Testing Effort, Product Size and Data Management
What: Person-hours, real data, percentage data, numerical data.

How: Entered into a project management tool or spreadsheet by relevant team members on a regular basis.

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Measurement Type	Description	Example Measurements
Effort	Measure of time and resources invested in project development and testing.	Total person-hours spent on development and testing
Schedule Adherence	Assessment of project timeline adherence compared to compliance with project timeline.	Variance between planned and actual project timeline
Code Reuse	Evaluation of how much pre-written code is used over the code written in the project.	Percentage of code reused from previous projects or libraries
Change Data	Number of changes made to the project over time and their percentage compared to all changes.	Number of changes implemented over time compared to oncoming sprints.
Product Quality	Assessment of system quality through defect detection.	Number of defects detected during testing.
Testing Effort	Measurement of time and resources allocated to testing activities.	Total hours spent on testing activities
Product Size	Completed and estimated size of media, documentation, classes and representation of actual size.	Number of components Required documentation size Size in bytes
Data Management	Managing and calculating cost, required tool's cost and estimated data required by each sprint and testing.	Cost Tool cost Length of project