

Requirements:

The client requested an app that tracks a person's behavior while driving with the help of sensor data from external sensors on hands and feet. The data obtained from the sensors should be saved locally to a database to provide specific insights into the user's behavior each day. The app should also be able to classify the person's behavior based on HRV in real time. The client wants the functions for calculating the HRV in a separate package to be modular and organized on specific domains.

Sensor data is retrieved in real time.

HRV calculation functions are implemented.

HRV package is not modular, currently all functions are in a single file.

Sensor Data not saved to database.

There are no plots/graphics implemented that provide insights into driver's behavior.

There is no ML-algorithm implemented for classifying driving behavior.

Informatik Deutsch, 2019-2020/Sommer Semester, ÜVSS, Lab01: Inspektion – für W01/02

Architectural Design Phase Defects Checklist

Nr.	Check Point / Defect Statement	Check Mark (✓) the Appropriate Column	
		Yes	N/A
A01	Is the overall organization of the program clear, including good architectural overview?	✗	
A02	Is the subsystem and package partitioning and layering logically consistent?	✗	
A03	Does the architecture account for all of the requirements?	✗	
A04	Are the classes in a subsystem supporting the services identified for the subsystem?	✓	
A05	Is there a coherent error handling strategy provided?	✗	
A06	Have classic design patterns been considered where they might be incorporated into the architecture?	✗	
A07	Is the name and description of each class clearly reflecting the played role ?	✓	
A08	Is the description of each class accurately capturing the responsibilities of the class?	✗	
A09	Are the role names of aggregations and associations accurately describing the relationship between the related classes?	✗	
A10	Are the key entity classes and their relationships are consistent with the business model (if it exists), domain model (if it exists), requirements?	✗	

Nr.	Check Point / Defect Statement	Check Mark (✓) the Appropriate Column	
		Yes	N/A
C01	Decision logic is erroneous or inadequate.		✗
C02	Branching is erroneous.		✗
C03	There are undefined loop terminations.	✗	
C04	I/O format errors exist.	✗	
C05	Subprogram invocations are violated.	✗	
C06	There are errors in preparing or processing input data.	✗	
C07	Output processing errors exist.	✗	
C08	Error message processing errors exist.	✗	
C09	There is confusion in the use of parameters.	✗	
C10	There are errors in loop counters.	✗	
C11	Errors are made in writing out variable names.	✗	
C12	Variable type and dimensions are incorrectly declared.	✗	

Nr.	Check Point / Defect Statement	Check Mark (✓) the Appropriate Column	
		Yes	N/A
R1	Requirements are incomplete.	✗	
R2	Requirements are missing.	✗	
R3	Requirements are incorrect.	✗	
R4	Initialization of the system state has not been considered.		✗
R5	The functions have not been defined adequately.		✗
R6	The user needs are inadequately stated.	✗	
R7	Comments		✗