Planned scheudule

Team name: Lab1-C

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 |
|  | 11. 04. - 11. 10. | 11. 11. - 11. 17. | 11. 18. 11. 24. | 11. 25. - 12. 01. | 12. 02. - 12. 08. | 12. 08. - 12. 15. |
| Bálint Tamás | Lecture Notes,  Planned scheudule | Lecture Notes,  Research different techniques for PCG processing | Lecture Notes | Lecture Notes,  Research techniques to compare the signals. | Lecture Notes,  Research techniques for classification | Lecture Notes,  Create the documentation and a presentation |
| Dominik Homoki | Planned scheudule | Research different techniques for PCG processing,  Preprocessing the data | Detect heartsound time locations.  Estimate the heartrate for a signal. | Separate systole and diastole regions.  Show different properties of the signals/segments. Compare regular and abnormal signals. | Classify each record as Normal or Murmur. | Create the documentation and a presentation |
| Levente Maucha | Planned scheudule | Research different techniques for PCG processing  Create a helper function to better visualize the signals | Detect heartsound time locations.  Estimate the heartrate for a signal. | Separate systole and diastole regions.  Show different properties of the signals/segments. Compare regular and abnormal signals. | Classify each record as Normal or Murmur. | Create the documentation and a presentation |

Task examples:

1. Research different techniques for PCG processing (spectrum, filtering, features, wavelets, energy,  
homomorphic envelope etc.)  
2. Inspect the database and decide which researched processes can you use.  
3. Create a helper function to better visualize the signals and the results.

4. Detect heartsound time locations.  
5. Estimate the heartrate for a signal.  
6. Separate systole and diastole regions.  
7. Show different properties of the signals/segments. Compare regular and abnormal signals. (You  
can use the features you found during researching)  
8. Classify each record as Normal or Murmur. You do not need to differentiate between the murmur  
types. (PCA, ICA, SVM etc.)  
9. Create the documentation and a presentation (∼5 min + questions) for your submission.