after every sprint 1 day for testing everyone documents his or her own progress for themselves put it together in the wiki

# Workpackages:

Before we start: set up github make a gantt chart

# First sprint: 2 week (14 days)

## 1) Python/c# wfdb toolkit: 5 days - Michael

- how to implement the toolkit into C#
- get to know what is the input file format (example .mat , .dat. etc....) and output (example .jpg png. etc..)
- see if we can convert the received data into a unified data format which can be stored in the database

## 2) Login In Window design: 3 days - Laura

Design the Login windows already in WINDOWS FORMS-> 3 buttons for the different identification methods, design all the methods NOT THE LOGIC!

# 3) Design of 4 different graphical user interfaces: 5 days - Mariana

WINDOWS FORMS

Every role gets its own GUI design. GUI is designed according to role. The different roles only see the buttons they are allowed to use. example -> nurse only has a button to see active patient

### 4) make a test plan: 3 days - Stefan

which components will be tested together - requirements for the test (when failed when not ), customer requirements have to be fulfilled

# **MEETING** after sprint - 1day

explaining progress to others and testing

## Second Sprint: 3 weeks (21 days)

## 1) Database design and SQL database: 4 days - Michael

- ER diagram of the 3 databases
- set up a database and fill in dummy entries (local database with XAMP)

#### + SQL connector: 1 day - Michael

is called separately from the main program logic at the start of the application

## 2) Login Window logic: 6 days

- there is a object of class user -> global variable of the user called "role" is assigned by the login logic to an integer - Stephan
- how to retrieve data from id/e-card reader Stephan/Laura

#### 3) and 4) program logic: 16 days

- log out - 1 day - Michael

 look at use case diagram what the program needs to be able to do: read patient from GUI -> File search and file browser functions - 4 days create user (admin!) - 1 day

create patient (read out data from ecard: when patients is created there should be a button that says import data from ecard. When clicked the user should see a screen where he is prompted to put the ecard in the reader. After ecard data is received the appropriate data fields are filled out by themselves) - (GIN connection: read out the ecard data) - 7 days - down below

display ecg - 2 days - Michael

-which gui is loaded depending on the role variable of the user - 1 day - Stephan

**getting data form usb do database: 1 day - Stephan** figuring out how to access the system file browser - easy!

## putting everything together: 2 days

SUM of days: 46

## **Buttons:**

Stephan - Patient Info Button function: distinguishes role of who is pressing button

Hold the ecard to the reader and show the according patient Open patient info window.

Michael - display ecg button: calls the python script (optional) edit button (only for physician and admin): Makes info editable

Roles: physician, nurse, patient, admin

# **Create Patient Button:**

Stephan - Auto-fill with e-card button: fills in info from ecard

Stephan - Add ECG-File button: with file browser provide file path to eca

Michael - Save Button: Uploads file to the database

Roles: Admin, physician

Laura - Search Patient button: opens the search window

Role: physician, admin

**Create User button:** opens the create user window

Stephan - **Get ecard hex value button:** gets hex value of card Laura - **Get id card hex value button:** gets hex value of card

Laura - save button: uploads to database

Role: physician, admin

# Windows: Mariana + laura

## Patient info window:

Display patient data, enter ecg viewing options, display ECG button, Button edit (only for physician and admin)

#### **Search Window:**

has text field where to search term, has a UI element where patient records are listed and can be clicked to open (button or double click depends on how the UI element works)

## **Create Patient Window:**

Text fields to enter patient data, save Button, auto fill with ecard button, Add ECG-file button

## **Create User Window:**

Text fields for input of data, two buttons for getting ecard/id-card hex values, save button

## to do list:

meeting for github
Time problem in WFDB
BLOB OR NOT BLOB Problem

## Patient information to be stored:

- patient identifier [int] (PK)
- name [string]
- surname [string]
- date of birth [string] (as defined by ecard)
- social security number [int]
- gender/sex [boolean]
- medication [string]
- (optional) title
- ECG-files [.hea, .dat] or [BLOB]

### User information to be stored in SQL (at least one log in option has to be stored)

- User id [int] (PK)
- Name [string]
- Surname [string]
- Username [string]
- Password [string]
- E-card number [hex]
- id-card number [hex]
- Role [int]
- Permitted [boolean]

#### C# class user

- User id from SQL
- Role

# notes:

deleting is not part of the admin user interface : ask sauermann?

logout button -> restarts the program

(optional) patient can look at their data without creating a user account u