

**CNG 492 - Senior Project and Seminar: Implementation**

**Software Configuration Management Evaluation**

Smart Home Senior Project

**Group Members**

2016129 – Anıl Peker

2041226 – Temirlan Bayeshov

1. **Source code**

In our project we using GitHub to store all files and codes we done so far. GitHub offers us SCM tools to prevent overwriting changes of each group member and also helps us to add new elements if needed.[1]

https://github.com/AnilPeker/Smart-Home-Senior-Project

1. **Tests**

We are planning to use “Github” integrated “Kiwi TSCM” as test parts of software configuration management system. Kiwi TSCM is an open source and free SCM tool and we are thinking that Kiwi TSCM is enough for us to configure test cases.[2]

1. **Document/file/binary**
   1. Server and Database

We created local server by using PHP and database by using MySQL in phpMyAdmin.[3]

3.2 Android

We are using Android Studio IDE for developing applications and projects.[4]

* 1. Arduino

In this part we using standard Arduino IDE.[5]

* 1. R

To perform some statistical analysis on data collected from Sensors we using RStudio and R-3.5.2. [6,7]

1. **Build Scripts**

We will use Scala Build tool for the building script. Scala is quite useful, basic and free as building automation

1. **Reporting/ Notification Scripts**

In error tracking and notification part we decided to use Sentry Error Tracking Software. It can be implements just only by few lines of code. When error occurs we will be able to learn information like:

* How and Why error occurred
* When error occurred
* The exact line of code
* Parameters of function

In case of error we will be notified directly.

1. **Version Tree**

We using GitHub in this part of our project;

1. **Log/History**

We are using “Git Bash” and “Github” to see log and history of this repository.

\* d2d9761 (HEAD -> master, origin/master, origin/HEAD) Update README.md

\* dd1a3bc Merge branch 'master' of https://github.com/AnilPeker/senior

|\

| \* 0c85b19 Add files via upload

\* | d0e6027 Create index.php

|/

\* 1376d74 (origin/readme-edits, readme-edits) Add files via upload

\* b38ac01 Add files via upload

\* 3a4e3f2 Delete Server

\* f3fbd4e Update README.md

\* b00cd1a Create Server

\* 6cc2bbe Initial commit

**References**

1. GitHub, <https://github.com/>
2. Kiwi TSCM, <https://github.com/kiwitcms/Kiwi>
3. PHPmyAdmin, <https://www.phpmyadmin.net>
4. Android Studio, <https://developer.android.com/studio/index.html>
5. Arduino, https://www.arduino.cc/en/main/software/
6. R, https://cran.r-project.org/
7. RStudio, https://www.rstudio.com/products/rstudio/