

# SCRUM development and presenting your Sprint

## Outline:

The purpose of this workshop and the following is to begin SCRUM development and work on your assignment. In your groups, make sure you set up your collaborative environments ready for working on the assignment. Make sure all members of the team have access and probably you already know all the members of your group.

You have been working in your groups for three weeks and have learnt the basics of SCRUM and the use of Sprints. I would like you to use SCRUM to develop the following projects. I would therefore like you to complete your first Sprint, presenting this to the rest of the groups. You will also need to present your work at week 7 workshops session.

## The projects:

In your group, you should choose one of the following projects:

### 1) Application to generate track recommendations from Spotify based that day's news.

Extract terms from news source. Use those terms to get recommended tracks from Spotify (track of the day, alternative (i.e. opposite to terms gathered), etc.)

See: <https://developer.spotify.com>, <https://newsapi.org>.

### 2) Application to show data for, for example, motorsport venues

Can we enter a particular series (eg. F1), get the next circuit that is scheduled, get the current weather data and news posts and social media (e.g., Twitter, Insta, etc) posts mentioning that venue? This information then needs to be presented well.

You should in your SCRUM teams:

- Secure API keys if needed.
- Create and use a GitHub repository to facilitate versioning, group communications etc.
- Develop a standalone desktop application in whatever language you choose.

You will be able to speak with the Client (Lecturers and Demonstrators) to get more input regarding the system, this must be done with a SCRUM approach. Periodically you will present your work to date – in the style of a 'sprint review' or a 'sprint retrospective' approach.

You need to address any bugs that are located within the desktop application to ensure it works correctly. However, as an open source project you will need to provide bug reports, and Git requests, including branching, and pull requests.

## Task 1: Create product backlog

As you have chosen your project to work on, I would like you to firstly create the product backlog by analysing the product requirements. You should allow and demonstrate changes to the requirements requested by the customers. Remember that for presenting your product backlog, you need to also address for example the priorities and sprint points.

## Task 2: Complete your current Sprint

Working in your groups make sure that not only are you underway into a Sprint, but that you are near completion. Remember that for a successful sprint you need to have addressed all elements of the Software Development Life Cycle.

- Requirements gathering
  - o Using Stories
- Taking items from the Product Backlog to the Sprint Backlog
- Design
  - o UML
  - o Class Diagrams
  - o Use case Diagrams
  - o Etc
- Development
  - o Implementation of the User Stories in this sprint
  - o Pair Programming (look up a Pair Programming Log)
- Testing
  - o Test Driven Development
  - o Test Results

However, there are other elements of the Sprint that need work, a stand-up meeting, burndown charts to show progress, logs evidencing work, etc.

## Task 2a: Pair Programming Logs

Pair Programming is an important part of Agile Development; it can provide many benefits over coding alone. In order to effectively carry out pair programming, one member of the team acts as the 'Driver' this is the person who is currently coding, whilst the other member of your team is the 'Observer'. The observer keeps a log of several details (see below) and roles switch every 20-30 minutes.

The log monitors:

- Time session started
- Number of lines of code written
- Errors spotted (and by whom)
- Activity (what's being coded), or tested, or compiled
- Comments

Create your own Pair Programming Log that you're going to use in the next tasks (and future sessions)

## Task 3: Presentation

I would like you to spend the remainder of the workshops, to focus on the development and completion of your Sprint, with the goal that you will present this at week seven workshops session.

I would like your presentation to focus on the following elements:

- Group Dynamics

- o What roles did people have in the sprint, and how was this facilitated, supported?

- Your Sprint

- o How did you group complete your first Sprint?
- o What were the challenges?
- o How did you decide on items from the Product Backlog to incorporate?

- Tools and Toolsets

- o What tools have you used to support your SCRUM Sprints?
- o How effective have these tools been?

- Evaluation

- o So far, how is SCRUM being managed?
- o What are your expectations of the project?
- o What advantages / disadvantages are there with Sprint that you've experienced?

Your presentation can take any form you like, such as:

- Powerpoint
- Prezi
- Flip charts

But you must give a presentation. It should last approximately 3-5 minutes.