## Introduction

* Introduction of trainers and participants
* Hopes & Fears exercise
* Learning objectives
* Intended audience
* Agile best practices review

## Essential Agile Engineering Practices

* Pairing
* Refactoring
* Test Driven Design / Development
* Functional Testing - Tools and Practices
* Continuous Integration
* Regression Testing
* Test Automation
* Build and Release

## Engineering Lab Overview

* What are we covering?
* What are we not covering?
* Introduce case study

## Refactoring Lab

* Introduce theory
* Demo 🡪 Do 🡪 Review
* Scenarios Covered:
* Introduce Variable
* Extract
* Rename

## Test Driven Development and Design Lab

* Introduce theory
* Demo 🡪 Do 🡪 Review
* Scenarios Covered:
  + New requirement
  + Changed requirement
* TDD Advanced Concepts:
  + Behavior-Driven Development (BDD)
  + Acceptance Testing

## Continuous Build and Release Lab

* Introduce Theory
  + Continuous Integration
  + Release Management
* Source Control
  + What is it?
  + Why do we do it?
  + How do we do it (and enforce it)?
* Learning Lab: Breaking the Build and Fixing the Build
* Demonstrations
  + Test Coverage
  + Breaking Build – e.g. with a compile error
  + ‘Works on my machine’
* Extended Theory
  + Developer Builds
  + Central Builds

## Continuous Build and Release Advanced Topics

* Incremental Releases
* Automated Deployment
* The Deployment Pipeline