

Engineering Tripos Part IIA

Paper 3F6: Software Engineering and Design

Revision 2014

1. Object Oriented Software Design, UML, Design Patterns

Review all main concepts

Review Example provided during lectures

Review Examples Paper 2, Questions 1-7

Review relevant Tripos questions from spring 2012, 2013.

Practice the following Tripos Questions Q1a-b 2011; Q1, Q3a-d 2010; Q1, Q4 (only definition of the virtual functions is required) 2008; Q1 a-b, Q2 2007;

Note: typically no code is expected but if it helps to illustrate pseudo code or any other language is fine as long as it is used correctly (!);

2. UI

Review all main concepts

Review Example provided during lectures

Review Questions from Examples Paper 4

Review relevant Tripos questions from spring 2012, 2013.

Find some apps on your phone (smartphone or feature handset) and some of the web sites you use and think how UI can be improved.

Come up with an idea of a mobile phone app and list all main use cases, sketch all main screens and UI flow.

Come up with an idea of a useful web site and list all main use cases, sketch all main screens and UI flow.

3. Software Management, including Testing, Methodologies, Models, Techniques such as Continuous Delivery, Refactoring, Five Whys, etc.

Review all main concepts

Review Questions from Examples Paper 4

Review relevant Tripos questions from sprint 2012, 2013.

Many of the other Tripos questions can be “updated” to 2014