

## Managing a project



### CS/SE Individual Practical

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- Managing a project involves a range of skills.
- You need to:
  - identify roles and responsibilities;
  - carry out a range of tasks;
  - be aware of deadlines;
  - plan and anticipate problems; and
  - deliver a product.

## The Developer role

- Studies the problem; determines a solution.
- Installs software, APIs and frameworks.
- Reads documentation; learns about tools.
- Writes code; debugs code; tests code.
- Writes documentation.

**For the CS/SE Individual Practical**  
You have been assigned this role.

## Plan for the unexpected

- In planning a project you should build in some contingency to deal with problems which could delay your progress.
- You don't know *which* problems will occur, but it would be surprising if *no* problems occurred.

## The Project Manager role

- Identifies work which is to be done.
- Sets parameters such as platform/architecture/language.
- Sets priorities. Communicates priorities.
- Doesn't install software on your machine.
- Doesn't fix bugs in your code.

**For the CS/SE Individual Practical**  
I have been assigned this role.

## Predictable unpredictables

- It could snow — labs and facilities could be closed or inaccessible.
- Strikes could happen — staff or students elect not to work.
- You could catch flu — a flu epidemic is predicted this year.
- Laptop theft — if your laptop was stolen you would lose work.
- Laptop failure — failures can be irreparable with no warning.
- Broadband failure — your broadband service could fail.

**Total cost due to predictable unpredictables**  
Events such as the above could delay you by a week.

## Managing deadlines

- Most major projects have interim deadlines, milestones or deliverables.
- Missing interim deadlines, milestones or deliverables usually incurs a penalty of some kind.

## Types of deadlines

There are different types of deadlines:

- **soft deadlines** which are not usually specified precisely — “this should be completed by Christmas”; and
- **hard deadlines** which must be specified precisely — “Part 2 of the CS/SE Individual Practical is due on Thursday 15<sup>th</sup> December, 2011 at 16:00”.

## Dealing with hard deadlines

Factor in the potential problems with predictable unpredictables by taking the hard deadlines and subtracting the estimated delay (we are considering this to be one week).

- Part 1 of the CS/SE Individual Practical is due on Thursday 27<sup>th</sup> October, 2011 at 16:00.
  - try to complete this by Thursday 20<sup>th</sup> October, 2011 at 16:00.
- Part 2 of the CS/SE Individual Practical is due on Thursday 15<sup>th</sup> December, 2011 at 16:00.
  - try to complete this by Thursday 8<sup>th</sup> December, 2011 at 16:00.

## Backing up your work

You should backup your code to your DiCE account.

### Secure copy (scp)

It is possible to copy an entire folder to your DiCE account with just one command. If *user* is your username (e.g. s1234567)

```
scp -r ForumApp user@student.ssh.inf.ed.ac.uk:/home/user
```

will copy the folder ForumApp to your home directory