Please fill in the following table, filling in each cell as carefully as you can for each test (i.e. there should not be *any* blank cells in a row). Please capture *all* tests that you plan to execute, however small or insignificant they may seem. Tests in each row should be unique and independent of each other, however.

Add or delete rows in the following table, as required, but do not delete or modify the columns. Take a look at the questions at the end of this document, to see what information should be included in each table cell. As we have learned, there are multiple types of objectives for prototyping and you need to be clear about exactly what each of your tests is trying to accomplish.

In general, more independent and more modular tests are better than just a single, giant test that attempts to test overall functionality. You probably want to test overall functionality towards the end of the term too, but you want to do this *well before* Design Day. This will give you time to fix any problems that you do find with your comprehensive prototype! The likelihood of such problems will be *much* smaller, if you have been thoughtful with your previous prototype testing though!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Test ID*** | ***Test Objective***  ***(Why)*** | ***Description of Prototype used and of Basic Test Method***  ***(What)*** | ***Description of Results to be Recorded and how these results will be used (How)*** | ***Estimated Test duration and planned start date***  ***(When)*** |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |
| **5** |  |  |  |  |
| **6** |  |  |  |  |
| **7** |  |  |  |  |
| **8** |  |  |  |  |
| **9** |  |  |  |  |
| **10** |  |  |  |  |
| **11** |  |  |  |  |

# **Filling in the “Prototyping Test Plan” table**

# **Why** are we doing these tests?

This explains the **objectives** of the prototype testing activity. Capture the reasons or motivation for the tests, giving enough background information to justify doing **any** prototyping at all. Specify whether the tests are for: learning, communication, de-risking, etc.

How will these results be used to make decisions or select concepts? Is there a better way of doing any of the tests? If so, why wasn’t the specific test done this way? For example, there may be time or cost constraints or perhaps other reasons that would justify your selected approach for achieving the test objectives. This is a chance for you to think about the **need for your test** and to analyze whether there are better ways to achieve the same results.

What are the **criteria for each test’s success or failure**? Make sure that the test will actually answer the questions that need answering.

# **What** is the prototype and what is the test?

Describe the prototype **type** (e.g. focused or comprehensive, physical or analytical) and justify the selection of this type of prototype.

**Describe the prototype** and **testing process** in enough detail to allow someone else to build and test the prototype, instead of you. What materials are required and what is the approximate estimated cost of the prototype and test setup? What work (e.g. test software or construction or modeling work or research) needs to be done? This is a chance for you to analyze the practicality of your planned testing activity. Can you actually build this prototype (i.e. do you have the skills, materials, time, etc.)?

# **How** is the prototype used? Does it match the objectives (i.e. the **Why)**?

What information will be **measured** and how will the **results be recorded**? Assuming that you have completed the test, what data will you have gathered? Is this important data for the project (i.e. do you need to know these results)? If not, what data needs to be gathered, instead? Is this all consistent with your defined objectives for the test?

# **When** is the testing happening and how long will it take?

How long is the test or the set of iterative tests estimated to take and what are the **dependencies** (i.e. what needs to happen before the testing can occur)? When are the results required and what depends on the results of this test in the project plan? The project Gantt chart should show how the testing fits in with the rest of the project work and might be a better way of displaying this information (i.e. just write the estimated test durations below). Are these **times ‘reasonable’** or are you better off doing things differently? Do you even need to do this test at all, given that it will take this long? Will the results be available in time to make any difference to the project?