

ILM Proposal Form

1. Based on your chosen ILM, what is to be taught? Describe in some detail the specific computer science concept(s) that will be taught. This section should offer sufficient detail to understand what the concept(s) is/are, why it is of use, and briefly how it will be presented. The ILM pool from which you are select vary significantly in terms of detail of description. Whichever ILM you choose, it is your responsibility to give sufficient detail so that the reader has a clear understanding of what is to be done and what is to be taught.
2. Give a step-by-step description of the execution of the ILM from the user's perspective. Sample (mock up) screen shots may be helpful. It is here that you will describe how the user will interact with the ILM to "learn" the concept.
3. Describe the expected user interactions, e.g. how will this ILM be better than a linear tutorial or a video? Why should this be an ILM? Will there be multiple ways in which the user can interact with the ILM? Etc.
4. Are there multiple lessons, concepts, or levels in the ILM? Does the ILM begin by assuming a particular level of background and as the student understands a concept at that level does it build on that understanding to enable the student to acquire a higher or more in-depth level of understanding. For example, consider an ILM that presents the subject of recursion. You could begin by introducing it in such a way that students can recognize it in a program. Next, show them how to use it to replace iteration. You could then present what actually happens in terms of speed and memory usage when recursion is used as a substitute for iteration. Next introduce recursion for more complex problems, etc.
5. In implementing this ILM, what technical skills will be required? (languages, environments, algorithms, data structures, etc.) Are there new technical skills that you will need to learn? For this question, be specific and detailed. Much of the weighting for the technical quality factor for your ILM will be derived from this section.
6. If your ILM will build on an already available ILM, e.g. found on the Web, be sure to describe in detail the extensions you will be making to the current system.
7. (TEAMS) If you are developing your ILM in a team environment, explain the division of responsibilities and work. Be specific and as detailed as possible as to who will do what. Remember, in a team project, the total work should significantly exceed that of an individual project. Teams must be exactly of size two.

Note:

While this form is only one page in length, the form, when completed, should be considerably longer. This document does not need to be the length of a requirements definition, but it should be of sufficient detail to inform the reader of the proposed ILM, its technical qualities, etc.