ISYS3207 Information Systems Project, Second Semester 2005

Marking Guide for Project Proposal

In marking this piece of work the procedure described below will be followed. The key objective is for the supervisor to give useful feedback to the students. Attach an extra sheet if necessary.

For each section of the proposal (see Section 1.2 below) read carefully, looking for the evidence of the specific points suggested in Section 2. Where any points are missing or deficient write clearly on the paper a detailed criticism and possible action necessary to remedy the fault. In all cases spelling or grammar errors should be commented on. At all times English expression should be clear and the layout of the work of professional standard.

Having given your comments, then a holistic approach (see Section 3 below) will be used to arrive at a final mark out of 10. Every effort should be made to discriminate between work of various quality.

1. Extract from course outline

1.1 Project Proposal

During the first four weeks of semester the team is required to prepare a project proposal. This proposal will be worth 10% of the final mark. It is a group task. All members of the team must take responsibility for its content and quality. In week four the proposal should be submitted to the supervisor for comment before being presented to the client for confirmation. The client will confirm the proposal by signing the confirmation statement (see example in the sample proposal document available from course web page). The proposal will then be handed to the supervisor for assessment.

Detailed requirements for preparing your team’s proposal under the heading “Project Proposal” on page 6 of Course Outline. It is finally due on Friday, 26 Aug 2005 and is to be handed to the supervisor at the class meeting.

1.2 Deliverables

The proposal should be no more than six (6) pages in length. It should be well expressed and well presented. A Word document isys3207sampleprojectproposal.doc, which provides a skeleton for your proposal, is available from the course web page. You should make use the document template 3207docs.dot, also available through the web, which should be attached to the proposal document to facilitate consistent layout and good typography.

The proposal should be aimed at your client and worded appropriately. It should make it clear early, why your client should be interested in reading this proposal. The Project Proposal should be structured using the following ten headings:

1. Introduction and motivation: the motivation for solving the problem or dealing with the issues that you are investigating. This section is intended to demonstrate your appreciation of the nature and significance of the problem to your client. In this introduction you should:
   a) establish the general field of the problem you are tackling,
   b) identify the particular focus of the problem within the field,
   c) identify any specific parameters of interest to your client.

2. Research question / Problem definition: define the research question or information system problem that you believe your client wishes you to tackle.

   A research question will usually be motivated by some ‘desire to know’ or ‘find out’ something and will necessarily assume some context. In stating a research question, the proposal should make both of these aspects clear. The task of the project team is to help find one or more answers to this question.

   A problem may be defined as ‘some obstacle preventing an organisation from achieving one or more of its objectives’. To solve a problem is to remove this obstacle. The problem should be stated from the point of view of the client. The task of the project team is to help solve this problem.

3. Objectives: set out your objectives for the project. Word them in such a way that, in principle, your client could assess the success or otherwise of the project by testing the achievement of these objectives.

4. Review of literature and related work: identify and describe briefly the results of any published work related to your proposal. A key element of a good proposal is that you understand what has already been done so that you can be working to extend that body of work. In the case of a system development project the review should include details of available commercial software.

5. Proposed methodology: describe in general terms your team’s methodology for solving the problem. State exactly what you intend doing, what methods you will use to do it, what data you expect to collect or what sort of prototype system you expect to build, and how you intend to process the data or test the prototype.
6. **Access to resources required:** specify what access to resources (computer software or hardware, business data, documentation, personnel to interview, etc.) you will need for the project (if any), why you need them and how you plan to use them. Any prototypes will be built using University equipment only.

7. **Project schedule:** include a summary of the project schedule extracted from the team project plan, indicating the expected timeline for the project.

8. **Summary:** a brief summary of the problem, objectives, methodology and expected outcomes.

9. **References:** properly formulated references to published work or other material that you have cited (see isys3207sampleprojectproposal.doc for the format to be used).

10. **Confirmation statement:** to be signed by the client, indicating that the information contained in the proposal is correct and complete and that the problem defined reflects the needs of the client (see isys3207sampleprojectproposal.doc for the format to be used).

### 2. Specific points to look for

#### 2.1 Introduction and motivation:

The ‘Introduction’ may include some statements introducing the general area of endeavour of the client, but should not be overdone. Meaningless hyperbole like ‘huge task’, ‘massive problem’, ‘completely overwhelmed by paper work’, ‘largest collection of insects in the world’, etc. should be avoided. There should be sufficient information here to show that the team understands the context and specific problem that the client has.

The ‘motivation’ for the research should be clear and should lead in a natural and logical way to the problem definition. Also note points (a), (b) and (c) listed above. There should be no criticism of the client or the client’s way of doing things. Phrases like ‘extremely inefficient’, ‘incompetent’ are insulting.

There should not be an attempt to describe or imply a particular answer to the question or solution to the problem.

#### 2.2 Research question or problem definition:

A research question should be expressed in the form “The XYZ organisation wishes to explore the options for ... and to find answers to the following questions: 1. ... 2. ... 3. ...”. Numbering is useful for later reference.

Each point should describe a specific research question. No additional descriptive material, explanation, evidence or motivation should be introduced in this section.

A problem may be defined as ‘some obstacle preventing an organisation from achieving one or more of its objectives’. To solve a problem is to remove this obstacle.

The fact that a system is ‘paper based’ is not of itself a problem. If it impossible to obtain the information necessary in a reasonable time frame and with reasonable expenditure of effort, then that is a problem. That the ‘process is completely paper based’ is a statement of fact, but not a problem definition.

The problem definition section should be quite brief. Ideally the problem definition should be expressed in three or four clear, bland statements. Each should describe a specific problem. No additional descriptive material, evidence or motivation should be introduced in this section.

#### 2.3 Objectives:

This section should begin “The objectives identified for this project are:”

Objectives relating to research questions should be expressed clearly in a form that allows the client to test whether they have been answered, for example:

“1. To find the best method of evaluating visitor satisfaction with the museum display” could never be tested, but it is possible for the client to test whether the objective “2. To devise and evaluate an instrument for evaluating visitor satisfaction” has been achieved.

Similarly objectives relating to a problem should be expressed clearly in a form in which their achievement can be tested or verified, for example:

“1. To improve the efficiency of the complaints section of the XYZ company” could never be tested, but “2. To reduce the resolution time of complaints to less than 6 hours” is verifiable.

There should be some logical progression from Problem definition to Objectives. Generally each point listed in the question or problem definition should be represented as one or more objectives. If some aspects of the problem have been removed from the scope and will not be addressed, this should be explicitly stated.
2.4 Review of literature and related work:
This is not simply a bibliography. There should be an attempt to evaluate sources and to indicate those that are most useful to the client or most relevant to the question or problem. The review should indicate the range of materials which the team intends to explore. It will probably not be exhaustive, but should be enough for the client to say “Have you looked at…” where there is an obvious omission. In the case of software, some existing systems should be cited, professional journals or specific test books where relevant. Web sites may be cited for contemporary opinion or trends but should be evaluated. Each source mentioned should be properly referenced using the Harvard notation, e.g. [Kennedy, 2000] and details of the sources cited in the References section (see below). In the case of a system development project, the review should include available commercial software.

2.5 Proposed methodology:
The purpose of this section is to provide the client with enough information to feel confident that his/her questions or problem will be adequately dealt with. As stated in the deliverables the proposal should state:

1. what you intend doing: This should give a step by step outline of the process, starting with initial investigation and data analysis, taking in any experimental work or surveys to be conducted, prototype systems to be developed, report to be written. There is no need for great detail at this stage, and the methodology may change in light of subsequent investigation. It is simply a ‘considered guess’.

2. what methods you will use to do it: Will there be a survey, if so how many subjects, how many items, how will it be conducted? If it is experimental, what sort of experiments, what equipment, how long will it take. If a prototype is to be built, who will evaluate it, how will this be undertaken, what tools will be used.

3. what data you expect to collect: Will it be qualitative or quantitative, what volume of data is expected, how it will be stored, can the client expect to evaluate a prototype, what sort of input will be collected from the client?

4. how you intend to process this data: Some idea of processing of the data, how it may be presented, what sort of results are expected, how these will affect the conclusions, what sort of outcome can be expected in the final report.

2.6 Access to resources required:
There should be some attempt to assure the client that there will not be a massive demand on their time or other resources or equipment. Some details should be given of the type of documentation that will be sought, the number of employees to be interviewed, the number of emails or letters to be posted and who is to pay.

2.7 Project schedule:
The time line for the project should be extracted from the Project Plan and represented here for the benefit of the client. Since it is simply an extract from the project plan it will not be assessed here.

2.8 Summary:
The summary should briefly reiterate the questions or problems that are being tackled, the range of objectives that have been set and the nature of the expected outcomes for the client.

2.9 References:
These should be properly cited according to the usual standards. Examples of a book, conference proceeding, a journal article follow and a web url follow. Web references should be used sparingly and only when the source can be justified by the author or its quality or relevance can be reassured some other way.


2.10 Confirmation statement:
This is effectively a confirmation by the client for the project to go ahead as proposed. The confirmation statement was given in the sample document available from the course web site, ISYS3207SampleProposal.doc. There should be no variation from this. This should be signed off by the client before the proposal is submitted to the supervisor for assessment.
# Project Proposal Assessment Sheet

**Team Id:** _____  
**Project Title:**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall:</strong> Length “no more than six pages”. ‘Flow’. Logical structure. ‘Compelling read’. English expression; grammar or spelling. No nonsense. No ambiguous or unsupported statements. Appearance. Proper use made of document template.</td>
<td><strong>1. Introduction and Motivation:</strong> About one page. Providing sufficient information for motivation and to explain the question/problem posed by the client. Shows understanding of client view. Does not imply solution.</td>
</tr>
<tr>
<td><strong>2. Research question/Problem definition:</strong> Enumerated. Expressed in form of a question/problem. Expressed clearly. Not simply statements of fact. Not encumbered by extraneous material that should have be presented elsewhere.</td>
<td><strong>3. Objectives:</strong> Enumerated. Clear, achievable. Expressed in a form that the client could verify achievement.</td>
</tr>
</tbody>
</table>
| **4. Review of literature and related work:** Enough for the client to be confident that material/software relevant to the problem will be researched. Provides some evaluation of sources. Does not have to be comprehensive at this time. | **5. Proposed Methodology:** All steps given in sufficient detail to allow the client to be confident that the question/problem will be dealt with. If included, references to existing methodologies must include some evaluation.  
  *Either The Research:* Survey instruments or questionnaires proposed, method of sample selection, people to be interviewed, intended treatment of data, form of output envisaged.  
  *Or Prototype development:* Proposed steps to be taken in building prototype. Functionality to be provided. Sample source documents and proposed output. Intended approach to testing to be employed. |
| **6. Access to resources required:** Any specific demands on time, equipment or other resources, such as the kind of documentation sought, the number of subjects to be interviewed, the software to be utilised, the number of emails or letters to be posted and who is to pay. | **7. Project Schedule:** Brief extract from project plan. Enough to give the client some idea of the time line anticipated. |
| **8. Summary:** A clear and concise summary of the problem, objectives, methodology and expected outcomes. | **9. References:** Correctly cited according to the examples given. Does not need to be extensive. |
| **10. Confirmation statement:** signed by the client. Wording as given in sample proposal. | **Marker:** ______________________________ |

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L Hossain, B Choi 2005
### 3. Marking guide:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mark out of 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall:</strong> Proposal would be accepted by any professional without alteration. It is within the length stipulated (“no more than six pages”). The document ‘flows’ as a whole: it has a logical structure from motivation to summary. It is a ‘compelling read’: English expression flawless; no grammatical or spelling errors; no nonsense, ambiguous or unsupported statements. Appearance is good, proper use made of document template.</td>
<td>10, 9</td>
</tr>
<tr>
<td>1. <strong>Introduction and Motivation:</strong> Sufficient information is provided to give suitable motivation and to explain the question asked or the problem faced by the client. Motivation engaging, the reader’s interest is stimulated.</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Problem Definition:</strong> Expressed clearly and not muddled by extraneous material that should have been presented elsewhere. Represent true questions or problems, and not simply statements of fact. No attempt to discuss the solution. Not insulting to client. Set out clearly with enumerated points.</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Objectives:</strong> Expressed clearly and in a form that the client can use to confirm that they have or have not been achieved. Enumerated.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Review of literature and related work:</strong> Sufficiently extensive for the client to be confident that all of the material relevant to the problem definition will be researched. Includes insightful discussion of sources indicating which are relevant or helpful and why. Various sources compared and contrasted. Web references used sparingly and only when some justification is given for their use.</td>
<td></td>
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<tr>
<td>5. <strong>Proposed Methodology:</strong> (This section should be substantial.) Sufficient detail given to convince the client that what is being proposed is feasible and that it will answer the question or lead to a solution to the problem. Well thought out showing depth in understanding of the methods proposed and some justification of their choice from among others. A clear picture of the processes to be followed.</td>
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<tr>
<td>6. <strong>Access to resources required:</strong> (This section may be quite brief.) Contains some consideration of demands on time, equipment or other resources, such as the kind of documentation sought, the number of subjects to be interviewed, the software to be utilised, the number of emails or letters to be posted and who is to pay.</td>
<td></td>
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<tr>
<td>7. <strong>Project schedule:</strong> The time line for the project simply be extracted from the Project Plan and presented here for the benefit of the client.</td>
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<tr>
<td>8. <strong>Summary:</strong> Briefly reiterates the questions or problem being tackled, the range of objectives set and the nature of the expected outcomes for the client. Clearly expressed. Gives a good executive summary for the client’s benefit.</td>
<td></td>
</tr>
<tr>
<td>9. <strong>References:</strong> All references correctly cited according to the examples given.</td>
<td></td>
</tr>
<tr>
<td>10. <strong>Confirmation statement:</strong> signed by the client.</td>
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</tbody>
</table>

Most of the aspects above are present and well dealt with, but one or two showing less than professional treatment. For example: whole proposal does not flow, is over length, some weak expression or careless layout, one or two slips in spelling or grammar. More specifically, motivation not convincing or engaging, problem definition not clear or not in a verifiable form, literature review stated without adequate discussion or too narrow, obvious omissions from literature review, methodology not in sufficient detail, inadequate consideration of available methodologies, inadequate consideration of essential resources, time line not well presented, summary not adequate or not an effective executive summary, one or two references incorrectly cited.  

All the major features are present and proposal generally thoughtfully done. Three or four not too serious omissions or weaknesses, for example failing to provide sufficient information in the motivation, or properly formulated objectives, or adequate description of the methodology. Several spelling errors or grammatical slips.  

Five or more omissions or weaknesses. Totally inadequate motivation and/or objectives and/or methodology and/or literature review. Multiple spelling or grammatical errors.