Verbat Technologies  
Proposal OF Services

For IEAG

|  |  |
| --- | --- |
|  | [The proposal for services is at the heart of an independent contractor’s sales tool kit. It combines key company information, your unique selling proposition, and your knowledge of a client’s needs and wants into a single document that can also serve as a basis for contract negotiations.  Use this sample proposal as an outline for developing your own.  To delete any shaded tips (like this one), just click the tip text and then press the spacebar.  The sample content throughout this proposal includes placeholder content for you to replace with your own. All placeholder text is surrounded by angle brackets (<>).] |

# Overview

Verbat Technologies is pleased to submit this proposal for services to support IEAG in achieving its goal for Consulting and Quality Assurance by providing a consolidated solution that is geared toward fulfilling the complete software development lifecycle of the application. Services include helping with arbitrating the business requirements, Verifying the architecture of the entire application (Database, Front end & back end) along with suggestions (and training where needed) for adopting best practices in PHP application development. Verbat will also ensure that all Quality assurance and Testing will not only cover the functional requirements but also nonfunctional requirements such as security, identifying application vulnerability etc. The details of which will be covered in the latter part of this document. In this document Verbat propounds its unique position in offering the services requested and how best it can effectively render those services to IEAG.

## The Objective

IEAG is in the process of developing a unique one-stop-shop collaborative project management platform that brings managers, designers, contractors, and stakeholders together in an interactive environment to ensure cost effective project deliveries and one point of accountability across the life cycle of a project.

Verbat can provide services to IEAG by providing the following services

* Business Analysis & Validation
* Database Architecture Validation
* PHP Application Code Review & Verification
* Quality Analysis and Testing

## The Opportunity

IEAG’s goals are to provide the following

* To create a digital HUB for its clients
* Leverage the digital hub to reduce cost of delivery by at least 30% compared to conventional deliveries
* Ability to integrate the HUB with IEAG’s clients infrastructure to
  + Optimize Output
  + Increase productivity
  + Optimize return on investment
  + Minimize site rework
  + Manage site wastage

## The Solution

Based on the initial understanding and analysis of the requirements that are catalogued in JIRA, IEAG has done a great job in cataloging its requirements. Also we have come to understand that the development team has adapted CORE PHP for developing the new application. While there are positives to the general approach that IEAG has undertaken towards gathering requirements and executing those requirements, Verbat has identified a few key areas where there room for improvement. Below are our recommendations for the same.

* Improvement in practicing scrum: While scrum is great, it needs to adapted and tailored to the needs of the organization. Sometimes adapting to elements of waterfall methodology can lend itself to better management of requirements and test cases. Also it can help in gaining a better understanding in effort estimates. More details will be covered in the following sections.
* Core PHP applications are relatively faster than PHP applications compared to popular frameworks such as Symphony and CodeIgnitor, but the reason why the industry as a whole leans towards application development using frameworks is because frameworks add tremendous value towards development ranging from faster development, better coding standards to in built logging & security features etc. This will be covered at length in the later sections of the document
* Requirements and test cases need to be developed hand in hand. Hence early engagement of the QA team is of utmost importance. JIRA is not always the best option to map requirements to test cases, sometimes traditional methods like Work Breakdown structure / Matrix etc. can prove more effective.
* In order for IEAG to become self-sufficient, it will need to have at least a few programmers cross trained in PHP frameworks so that the entire organization can benefit from it in the long run. Verbat’ recommendation is for IEAG developers be cross trained by Verbat during early development. The details of this will be covered in length in the rest of this document.

# Our Proposal

Verbat is a Digital Technology Services company with over 15 years of experience in delivering Internet and Mobile Solutions to Enterprises, through Agile Development and Application Management methodologies. Verbat’ s tried and tested delivery model leverages its India based Offshore Software Development Services thus providing the clients with the right mix of cost efficiency, operational control and flexibility.

Verbat has developed its own brand of Scrum based agile development model called “AGILIS”. Our experience in Distributed development using Agile and Scrum has given us the unique advantage of tailoring Agile processes to meet the requirements of the client. We can help guide our clients in establishing a process that is meaningful to the companies’ culture.

Verbat can provide the right amount of flexibility to meet the working hours of our clients. Our holidays and work hours are tailored so that our employees are available and at the clients disposal whenever they are called for.

Verbat is also a powerhouse in PHP development. Our experience in developing multitenant cloud/web based applications span across multiple business domains, as well as using different PHP frameworks ( Symphony, Cake PHP, Code Ignitor to name a few)

As a development partner Verbat recognizes the need of IEAG to maintain a culture of high productivity and optimum returns on investments. Our Rational for the recommendations given above are detailed below.

## Rationale

|  |  |
| --- | --- |
|  | [Describe your reasons for developing the project as you have proposed it. You may need to justify why you have chosen your unique approach. Consider including the following points in your rationale.] |

### Improvement in the scrum methodology

Based on the Information found in JIRA. A few glaring issues were noticed.

1. Effort estimation was not used in the sprints.
2. Completion time of the story or task were not recorded in Jira
3. Sprints were running behind schedule.
4. Sprints were 1 month long ( not always ideal)
5. Lack of a formal requirements document. (not a necessity, but helps)

While No. 2 is sometimes unavoidable, it can be eliminated over time. The key is to understand and be able to predict the effort required to complete the user story or task. This does not happen at the onset of every project, nor does it happen in newly formed teams. It takes between 4-5 sprints before the team can determine its speed or the amount of stories it can consume per sprint.

Effort estimation before the sprint starts and the record of actual effort against the predicted effort estimate, helps the team to be able to predict the actual effort in the long run (Hence the magic figure of 4-5 sprints). This will automatically help in completing the sprints on time in the long run

Typical sprints are frozen. This means once a sprint starts you cannot add or remove items from the sprint backlog. Having sprint that is one month long, puts the whole team behind if there are frequent changes in requirements. The only option out is to either scrap the sprint or reduce the sprint cadence. Verbat recommends sprints that are 2 weeks in length.

From our experience having a formal document pertaining to requirements is very helpful since it forces you to think about nonfunctional requirements, the scope of the project, limitations etc. It also helps to keep track of the requirements and how it relates to use cases and test cases through the maintenance of a Work Breakdown Structure and Matrix.

### Best Practices and Frameworks

In order to establish the practice of writing well-structured and efficient programs, following the best practices laid out by the industry is important. Frameworks are the cornerstone of following best practices. Frameworks ensure the following best practices

1. Enforces the use of MVC framework
2. Will help the programmer to write well-structured code
3. Enhance the readability of the code
4. Error logging and security are implemented by default ( means we don’t have to create the functionality ground up)
5. Maintenance is easy as everyone is aware of the pattern
6. Development is faster because a lot of the functionality is available within the framework.
7. Adding new functionality is faster because of the availability of plugins
8. Frameworks help the application to become futureproof.

Please see the additional documents for an overview of the best practices followed by Verbat.

* + Generic Best practices followed by Verbat (VerbGenericCodeReviewBestPractices.doc)
  + Best Practices followed by Verbat in Core PHP (VerbPHPCodeBestPractices.doc)

80-90% of these best practices are covered by default when using a framework.

### Peer Programming and code review

Peer programming and code review reduces defects, because it is easier to spot defects when code is reviewed by a second developer. Aside from reviewing code, Verbat will also be involved with Design and testing of the application.



As an example, to understand the gains attained through development with peer/code review. Please see the table below.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **# Defects** | **Cost/Defect** | **Total Cost** |
| Cost to find/fix defects in QA = | 10 | 10 | 100 |
| Cost to find/fix defects at customer site = | 10 | 10 | 100 |
| Total Without Code Review: | 20 |  | 200 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **# Defects** | **Cost/Defect** | **Total Cost** |
| Cost to find/fix defects in review = | 91 | 32 | 27 |
| Cost to find/fix defects in QA = | 53 | 10 | 50 |
| Cost to find/fix defects at customer site = | 63 | 10 | 60 |
| Total Without Code Review: | 20 |  | 137 |

1 - Industry-standard rate: 45% of defects are found during code review instead of QA or at customer sites.

2 - Industry-standard rate: Code review typically costs 30% that of QA because bugs are found faster and locations/methods of fixes are already identified.

3- Code review removes defects both from QA and at customer sites, so these numbers are reduced proportionally.

## Execution Strategy

Our execution strategy incorporates proven methodologies, extremely qualified personnel, and a highly responsive approach to managing deliverables. Following is a description of our project methods, including how the project will be developed, a proposed timeline of events, and reasons for why we suggest developing the project as described.

|  |  |
| --- | --- |
|  | [Summarize your strategy based on your research into the client’s needs, your experience in providing similar services to other clients, etc.] |

## Technical/Project Approach

|  |  |
| --- | --- |
|  | [Describe the details of how the project will be managed from start to finish. This will include your specific methodologies for completing deliverables, project management tools and techniques, communications with the client, methods to evaluate and mitigate risk, and how the project will be evaluated.] |

## Resources

|  |  |
| --- | --- |
| Area of expertise | Resource Name |
| Open Source Architect |  |
| Database Architect |  |
| Test lead |  |
| Sr. Business Analyst |  |
| QA |  |
| QA |  |

## Project Deliverables

Following is a complete list of all project deliverables:

|  |  |
| --- | --- |
| Deliverable | Description |
| Updated SRS, WBS, WBD | Reviews the SRS and verifies that it maps to the BRD |
| Test cases | Maps all the test cases with the SRS |
| Code Analysis Results & Recommendations | Results of peer review and recommendations on best practices |
| Database analysis results and recommendations | Updates on the DB schema, based on Peer review & best practices |

## Timeline for Execution

|  |  |
| --- | --- |
|  | [Summarize the timeline of project-related events from start to finish.] |

Key project dates are outlined below. Dates are best-guess estimates and are subject to change until a contract is executed.

|  |  |
| --- | --- |
|  | [In the table that follows, include all important dates related to the project, broken down by date and duration. The descriptions shown are for illustration purposes only: replace them with meaningful descriptions related to your project. Items can include such things as payment and project milestones, installation schedules, meetings, or reviews.] |

|  |  |  |  |
| --- | --- | --- | --- |
| Description | Start Date | End Date | Duration |
| <Project Start> |  |  |  |
| <Milestone 1> |  |  |  |
| <Milestone 2> |  |  |  |
| <Phase 1 Complete> |  |  |  |
| <Milestone 3> |  |  |  |
| <Milestone 4> |  |  |  |
| <Phase 2 Complete> |  |  |  |
| <Milestone 5> |  |  |  |
| <Milestone 6> |  |  |  |
| <Project End> |  |  |  |

## Supplied Material

The following materials are to be supplied by IEAG for this project. For Verbat Technologies to meet project milestones, this material must be supplied on schedule. The due dates included in the following table represent our best guess based on current proposed project dates:

|  |  |
| --- | --- |
| Materials to be supplied by IEAG | Due Date\* |
| SRS |  |
| Source Code |  |
| DB schema |  |

\*We cannot be responsible for cost overruns caused by client’s failure to deliver materials by agreed-upon due dates.

# Expected Results

|  |  |
| --- | --- |
|  | [Describe the results expected from the project and why your approach will achieve those results.] |

We expect our proposed solution to IEAG’s requirements to provide the following results:

## Financial Benefits

* <Result #1: Brief description of desired result>
* <Result #2: Brief description of desired result>
* <Result #3: Brief description of desired result>

## Technical Benefits

* <Result #1: Brief description of desired result>
* <Result #2: Brief description of desired result>
* <Result #3: Brief description of desired result>

## Other Benefits

|  |  |
| --- | --- |
|  | [Use this section to describe less tangible benefits such as increased morale or improved customer satisfaction.] |

# Pricing

The following table details the pricing for delivery of the services outlined in this proposal. This pricing is valid for <## days> from the date of this proposal:

|  |  |
| --- | --- |
| Services Cost <Category #1> | Price |
| <Item Description> | <$0,000.00> |
|  |  |
|  |  |
| Total Services <Category #1> Costs | <$0,000.00> |
| **Services Cost <Category #2>** |  |
| Facilities |  |
| License Fees |  |
| Equipment Rental |  |
| Training |  |
| Travel |  |
| Marketing |  |
| Shipping/Handling |  |
| Total Services <Category #2> Costs |  |
| **Services Cost <Category #3>** |  |
|  |  |
| Total Services <Category #3> Costs |  |
| Total |  |

<Sample> Disclaimer: The prices listed in the preceding table are an estimate for the services discussed. This summary is not a warranty of final price. Estimates are subject to change if project specifications are changed or costs for outsourced services change before a contract is executed.

# Qualifications

Verbat Technologies is continually proven to be an industry leader for <high quality/guaranteed> <product/service> in the following ways:

|  |  |
| --- | --- |
|  | [Describe what sets your company apart from your competition (your unique selling proposition).] |

* <Unique point #1>
* <Unique point #2>
* <Unique point #3>

|  |  |
| --- | --- |
|  | [Describe the strengths of your company, focusing on specializations that are most relevant for this project. As appropriate, include additional strengths of your unique selling proposition that provide benefits the customer may not have articulated.  Identify qualifications that support your ability to address specific client needs for the project.  Provide information that shows how you can meet the required schedule, such as staffing/subcontractors and percentage of time devoted to the project.] |

# Conclusion

|  |  |
| --- | --- |
|  | [Close out the proposal with a statement that demonstrates your concern for the client and their needs, your expertise, and your willingness to help them solve the issues in question. Include any expected next steps and note the ways they can get in touch with you.] |

We look forward to working with IEAG and supporting your efforts to improve your sales cycle with <integrated CRM, JIT Inventory management, and training and support services>. We are confident that we can meet the challenges ahead, and stand ready to partner with you in delivering an effective IT support solution.

If you have questions on this proposal, feel free to contact <Name> at your convenience by email at <Email address> or by phone at <Telephone>. We will be in touch with you next week to arrange a follow-up conversation on the proposal.

Thank you for your consideration,

<Name>  
<Title>