Typical frequently asked questions about LAMP platform development project

Analyst: Hi, please, provide me your questions.

Developer: 1). Does system require to be built up from scratch?

Analyst: Yes, it does. As a development project of web UI - the design and implementation complete from scratch.

Analyst: The platform proposed is Yii+Jquery, also, any good libraries can be used in case of some missing inside this two...

Developer: okay - understood

Analyst: Also, any existing template from Yii can be used if will be applicable...

Developer: 2). is Yii a de-facto requirement for platform? Because, I do have one MVC + jquery - lighter and faster than Yii - which can boost the delivery time.

Developer: Yii - would be little bit overhead with respect to the Admin interface for DC Service

Analyst: Yii is chosen by many properties and features, surely it completely overheads for admin UI, but easy future support and well standardized code is big advantage.

Analyst: As i can to see now, the Yii's potential will be used minor way and limited with view templates and some users management CRUD with mysql DB...

Developer: Yes, Front-End can be designed as per the DC Web UI Requirment

Analyst: please, note that DC UI will use local SQL db (mysql) only for user's accounts management

Analyst: all another functional operations will require cli interaction with request/response protocol based on json format

Analyst: In the DC service the distributed DB model used, so many hosts are uses the same DB structure and results are merged after operation is done.

This is not a general solution and each operation results need to be merged own way...

The request can be done with or without merging.

Analyst: How do you find the specification on DC UI?

Analyst: Looks complex or not?

Developer: That would be moderate

Developer: Basically - that's CRUD operations with Filters/Pagging/

Analyst: Yes, it is

Analyst: Also, some not typical backend requests using cli...

Developer: Yes - that's okay but JSON parsing is normal now a days with APIs being mainstream data

Analyst: Also, you need to work with some installation of the HCE system, because cli utility native way can be used only on the same host with DC and DTM services...

Analyst: So, you need to have to install single-host system or download and use VM image

Developer: No problem.

Developer: Curious, how the Software development is going to be managed?

Developer: I.e. via any tool?

Developer: Like JIRA / Rally / Trello or you would review on the go and feedback will be mailed?

Analyst: The development methodology will be Agile, managed by Jira

Developer: Okay - great, stories/tasks/issues/

Analyst: Issues i think, but that can be discussed and defined/changed later

Developer: okay

Analyst: We have own git repo with rsa public key authentication.

Developer: Okay - great

Developer: I use tortoiseGit for client for push/pull/commit

Developer: Also, the requirement document is fine, but that would be hard to get started with

Developer: Hope you getting the point

Developer: This happened last year with another big project

Developer: The client lacked the proper management and developers created a system on their own - which was out of client's initial vision

Analyst: I need the probation period, about one week sprint to implement limited closed scope, like the "Sites list page" (GR-S-SL) page two of main requirements document

http://hierarchical-cluster-engine.com/docs/pdf/DC_web_ui_general_requirements.pdf

Completely functioning with DC service integration and real request/response operations implementation as well as view and client-side jquery controls (grids, dialogs and so on usage).

Developer: Yes - that's fine

Analyst: Also, as You can to see, the requirements document is not finished and surely, all additions will be estimated later and included in scope and backlog.

Developer: Okay, but overall, is that more than 50%?

Analyst: Surely, i suppose for alpha version it is about 80%

Developer: Okay

Analyst: Now, we need to agree some minor formal development methodological points now...

Analyst: Have you seen the specification on coding style?

Analyst: For php language and javascript defined in the requirement specification doc

Developer: Yes, for PHP: its PEAR Standards

Developer: And for jQuery - standard styles

Analyst: Also, all points in the "General principles and rules" section

Analyst: Please, note that the code verification, structural and architectural analysis of implemented scope items will be done by high professionals strict and deep way...

Analyst: So, accepting of job results will be strict and detailed

Developer: Yes, Any specification for the code editor to use?

Developer: Like, i am using netbeans for PHP

Analyst: That will be good if it will be eclipse and PDT project but this is not a mandatory requirement

Analyst: As I've mentioned before, we will have one week sprints with limited scope

Developer: Yes,

Analyst: The backlog will be agreed before sprint started, for management the Jira will be used, the git repo for code (i'll provide You with accounts later)

Developer: Okay.

Analyst: It is very good if you will use odesk team application to screen and presence at work time...

Developer: Yes sure

Analyst: But, you need to use estimation for each backlog issue and accounting report will be done on the basis of estimated and logged time in Jira.

Developer: Okay

Analyst: Each backlog issue will be tested and approved before included in to invoice report

Developer: Okay.

Analyst: In case of some inadequacy or not full cover of functionality description or some not regular behavior and business logic of implementation the issue will be reopened back with note and need to be fixed...

Developer: Each backlog issues would be of how many hours?

Analyst: Depends on functionality, from 1h to 2-3d...

Developer: And does it covers the hours spent on discussion?

Analyst: I propose to log the discussion time as separated job issue with name "Discussions and meetings"...
But we need to align one week scope issues to have finished functionality volume at the end of each week to have a possibility to check and test completely ready to use features...

Analyst: Also, i suppose that some change requests will appears from time to time, so they will increase the basically defined and agreed week scope, so please, be ready on some overtime (in reasonable measures)...

Analyst: I expecting on one or two full time developers...

Analyst: So, developer(s) are hired on team, registered in gira, uses the odesk team application for time presence and screening and the jira - to manage sprints, issues, to estimate, planning and log worked time...

Analyst: If all that things are clear, we are ready to start, and i hire You now, but preparation of jira and git accounts can to take a bit additional time and i need the gmail address for jira registration and public rsa key - for git registration.

Developer: Okay

Analyst: Also, i suppose long period of support and we have one more service application named "Distributed Tasks Manager" (DTM) that is requires the web-admin UI too, so i suppose that it will be next project for LAMP platform...
Developer: Okay - so on an average - monthly how much invoice is billed for LAMP platform developer?

Analyst: Each developer has own contract and agreements on per-hour based accounting

Analyst: Also, even we will have one week sprints, it will be better to have monthly aligned invoices...

Analyst: In case of special requirements it can be weekly aligned...

Developer: Okay - so all in all in a month - does the sprints have approx. 80-90 hours of work?

Analyst: One week spring usually has 40h (5d*8h) per developer.

Developer: Okay

Analyst: It is okay if developer can to work 9h/d or 6d/w but, usually it is treated as overtime and not planned in regular estimation, to have some reservation on bad case...

Developer: Okay

Developer: Sounds a good management of software development

Analyst: I think we can to take for first probation one week sprint with some functionality of one menu item that is uses the cli utility and DC API jsons

Analyst: It will be page w/o authorization, and have a limited functionality according with sprint scope as I've mentioned before.

Analyst: What do you think?

Analyst: I suppose You will spend some hours to install the HCE package, to configure and to start the DC service to became ready to use cli utility API...

Analyst: Also, i think you need to have some knowledge about the HCE project and its main parts, so you need to study some documentation on main project's site
http://hierarchical-cluster-engine.com/products/
http://hierarchical-cluster-engine.com/blog/2014/04/21/distributed-crawler-application/
http://hierarchical-cluster-engine.com/documentation/
and so on...

Analyst: Please, note that you need to be ready to configure and to install complete HCE project with three parts (hce-node core, DTM and DC) and to run the DC service to be ready to use it locally because you will need to debug and to test your design...

Developer: Can you please elaborate the sprint task #1? (Project structure, application frame, platform environment and related preparations)

Analyst: this task is about some preparation for implementation on server and client side, Yii framework, some web-application minimal configuration, empty view templates and so on

Developer: ok

Developer: I want to discuss DCWAII-2 "GR-S-SL" - Sites list page

Analyst: to design the functionality of view of sites list page the real interaction with DC service is not mandatory (on development stage)

Developer: ok

Analyst: but is will be good, if it will be done when development finished

Developer: ok

Analyst: also, i can to provide the set of jsons of responses for each request

Developer: ok

Analyst: the server-side is typical backend, but instead of SQL the cli utility used to interact

Analyst: the backend server side receives form request from filter sites list page, create request json for operation SITE_FIND, make request, get response and return json to client-side frontend

Developer: I am creating dummy table and will list the data in front end (Client end)?

Analyst: to design view - the dummy table is okay

Developer: and i will put some dummy data for testing.

Developer: and will list in front end and will provide functionality for edit/delete/update for user. ?

Developer: Can you please elaborate - request from filter sites list page

Analyst: it will be better if you will get the VM image and start it on developer's host machine, is it possible?

Analyst: so, you can to try to run completely system on local server and to run any cli management utility

Analyst: http://packages.asm-search-engine.com/vm/ images located here

Developer: ok thanks

Analyst: the request json examples can be taken from tests, located in the hce-node-tests.zip:/api/python/data/ftests/

Analyst: the hce-node-tests.zip it is a demo test suit archive DTS or directory where is it installed

Analyst: the DTS archive as is can be taken from here: http://packages.hierarchical-cluster-engine.com/src/hce-node-tests.zip

Analyst: for example, the request json to find site by URL link template string: hce-node-tests.zip:/api/python/data/ftests/dcc_site_find_rnd.json

Analyst: it is very simple json: {"url": "http://127.0.0.1/", "criterions": null}

Analyst: the url field is template

Developer: for testing - I am creating one demo test table and will put some dummy data there. And will provide Add/Edit/Delete/ Status / functionality. which will interact with database. (using YII framework)

Analyst: please, do not use database

Analyst: you need to make the stub of cli utility interaction, so you can to make stubs using json files of responses

Analyst: the interaction schema will be in steps:

1) frontend form, get URL template string

2) forntend send form to backend

3) backend pars request, make json for cli management utility

4) backend simulate utility call

5) backend get stub utility response json with Site object structure if found

6) backend send response json to frontend

7) frontend pars response json and visualize result with grid representation of fields

Analyst: documentation about the DC service and cli utility usage:

http://hierarchical-cluster-engine.com/docs/pdf/DC_application_requirements.pdf

http://hierarchical-cluster-engine.com/docs/pdf/DC_application_architecture.pdf

http://hierarchical-cluster-engine.com/docs/pdf/DC_public_client_API.pdf

Developer: We need more clarification on business logic of this application.
Analyst: This is typical administration of service with front end and backend sides. All operations are related with cli utility – the DC service public client briefly described in the document above. The objects like the "Site", the "URL" and so on as well as operations and results are defined in the main DC service architecture description: http://hierarchical-cluster-engine.com/docs/pdf/DC_application_architecture.pdf. Also, all business logic definitions briefly can be observed in this document.

Developer: "The sites manage page used to execute main operations with the Site objects and consists of several pages or/and dialogs depend on implementation and visual controls UI library used."
We are assuming that the details given for site list page and site field view is just basic information which is to be followed while implementation. Can you please elaborate this point?
Analyst: Surely, complete detailed elaboration possible after mockups ready and complete objects structure definition finished. But all objects structure can be studied in jsons listed in the document http://hierarchical-cluster-engine.com/docs/pdf/DC_public_client_API.pdf appendix B.

Developer: What is the use of site recrawl and delete dialog page? Please elaborate more on it.

Analyst: This pages are for main business logic of correspondent operations described in the main DC service architecture document http://hierarchical-cluster-engine.com/docs/pdf/DC_application_architecture.pdf for correspondent operations (pages 9 and 5). Note, that Site re-crawl is not a dedicated DC service operation, but can be implemented using the SITE_UPDATE.

Developer: As per the shared requirements, this application will be having three types of users. Can we have the roles and privilege list of all of them?

Analyst: Yes it is, it can be implemented following some common ACL standard. Also, implementation supposes roles as: "administrator", "user" and "viewer". Best implementation of flexible ACL supposes that it is not fixed static set of permissions, but possibility to do operations like view and modify. Also, the Site object is related with user by the user Id field that is stored on the DC service side. Users can to operate only with sites that is assigned for them, even for view action not only for modify. The concrete implementation of ACL management page can be designed different way and depends only on developer's vision that can be discussed during mockups design and as regular development meeting.

Developer: Do you have any reference website from design prospective of frontend user?

Analyst: The main visual design supposed very minimalistic and basic view based on regular jquery library tools and Yii templates. The examples can be the Yii demo site projects:

http://www.cniska.net/yii_blog/index.php/site/login

http://demo.bsourcecode.com/yiiframework/

http://www.yiiframework.com/resources/

http://www.yiiplayground.com/index.php

http://yii-user.2mx.org/en

Developer: Please elaborate more on the functionality of Batches, Scrapping templates etc.

Analyst: the Batch – it is internal object of DC service that is used for main crawling process. It is a main unit of the crawling task that is executed on the HCE cluster node as the task. It is container for items that are processed by the crawler and processor tasks. Now administration cli utility that is basic API for web UI does not supports any

operations with the Batch object directly only some statistical information can be obtained from DC service.

Developer: We need more inputs on Trackback Log area.
Analyst: As it is specified in the main requirements document, it is area for debugging and information purposes. For Eclipse IDE users it is very similar with the window with tabs like: "Problems", "Console", "Progress", "Tasks" and so on. First implementation supposes tabs like "Request json", "Response json", "stderror" and "Errors". The purposes are directly related with tab's titles and common sense.