# **KITSUI Project decision Rationale**

Decision logged by: Adam Campbell Date of logging and approval: 20/05/2016 Decision: Modification of Project architecture - Server side code, Lambda functions

**Summary:** The original server side functionality produced by the Kitsui team has stated we will produce *N* number of Lambda functions required for Server side processing. The original concept stated we would produce these functions required in fulfilling requirements outlined by the Client, and each function would serve a singular purpose - receive some form of user input (data), process said data and return a response. eg; log a user into the system, save a new post to the database etc.

We have now opted for a more controlled approach of producing only one singular lambda function which will register the type of request issued by the user, act accordingly by importing the required code to fulfil their request at runtime.

**Rationale:** The rationale behind this decision has mostly come down to cost. The cost model for AWS states that each call to a lambda function incurs a small charge, and that each lambda function will be charged a small figure for every 100 milliseconds of CPU processing time, minimizing the number of lambda function calls can be achieved through the new approach. The second issue we face with multiple lambda functions is that they cannot be chained without requiring an intermediate service, eg; function A calls function B before function A has finished processing to perform a subtask (B)

After a lengthy team discussion, we have decided the singular lambda function approach with flagging for injection of required code during execution. This approach ensures that there will be a reduction in both lambda calls, reducing the cost associated with processing of user data, and providing flexibility compared to that of what was seen via chaining lambda function via intermediate services.

# **JIRA to Trello**

#### 02/05/2016

We were originally told be Bullet Proof that we would be added to their JIRA account to handle managing our tasks. Due to not being granted access to JIRA we were forced to find our own alternative for Sprint 1.

UPDATE: We have since received access to JIRA and are in the progress of moving all data across.

# **BulletProof AWS to individual AWS Accounts**

### 02/05/2016

James was having issues with getting us access to a paid AWS account. Since the tools we need for now are also available on the Amazon free tier, we are sticking with AWS accounts signed up for individually by each team member. This should have no impact on scope or the finish date of the project.

## **GitHub to BitBucket**

### [date]

BitBucket is a tool provided by the same company as JIRA, and integrated with it. Additionally it would have allowed us to keep our code private before release. We decided to try using it, but we found it performed any operations unacceptably slowly, so we switched back to using GitHub. This delayed the team by a few hours as all data needed to be downloaded then uploaded again to Github.

# Chat StandUps to Documenting StandUps.

## 05/05/2016

Initially we planned to do daily standups through a chat app called Slack. We found them to be hard to find and follow even where there were only a couple of standups in the chat log. We opted for a document layout in Google Drive so it was searchable and neatly organised.

## **Documenting Standups to Real Time Standups**

## 28/07/2016

After several months of using documented standups, our team have found that having each member write down their standup information daily does not provide any additional benefits. We have found that we do not refer back to the document for reflection, and therefore found the storage of said information to be a redundant process.

We will be transitioning to a real time stand up procedure in place of the current method. As we are in frequent communication via a private group on Messenger (Facebook), each member is constantly aware of what all other members are working on, issues are discussed and solved as a team, and reflection of previous days work as discussed in correlation with today's work.

## Adopting FAGAN method.

#### 05/05/2016

We decided to use the fagan method as a way to review our documents as a group. This was to make sure that our documentation is up acceptable standards.