Sprint 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Implementation of Amazon API | Create “AWSHandlerResolver” class for building connection to server of Amazon with AWE Commerce Service. Get product corresponding information from Amazon through Product Advertising API | Tananun Songdechakraiwut | 02/16 | 02/20 | None |
| ItemSearch Request | Create “AWSRequest” class for setting up the port type of connection. Post “ItemSearch” request. Pass “Searchindex”,” Keywords” parameters through connection. | Tananun Songdechakraiwut/  Xiaoshuang Yin | 02/16 | 02/20 | Implementation of Amazon API |
| Database | Create “JDBC” class for parsing XML file returned from “ItemSearch” request. Use parsing result create product database | Fang Qi | 02/20 | 02/24 | Implementation of Amazon API/ ItemSearch Request |
| Crawler | Create “LinguisticAnalyzer” class for task “Crawler”, “Htmlparsing” and “Baby linguistic”. Set “IFrame URL” returned from “ItemSearch” request as the root URL. Use root URL search reviews URL with HtmlClient 3.1 library. | Shengxin Qian | 02/20 | 02/22 | Implementation of Amazon API/ ItemSearch Request |
| Htmlparsing | Use reviews URL to download html files of reviews. Parse html files and extract the review paragraphs with regular expression inside Java API. | Shengxin Qian | 02/22 | 02/23 | Crawler |
| Baby Linguistic Analyzer | Select positive and negative words sets with extracted reviews. Calculate the frequency of each words inside pre-defined words sets. Use the result of number of positive words minus number of negative words as indicator of sentiment. | Shengxin Qian | 02/23 | 02/24 | Htmlparsing |

Sprint 1 test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Amazon API and ItemSearch Request test | Test whether the “AWSRequest” and “AWSHandlerResolver” class could return the required products and the corresponding product information is correct. | Tananun Songdechakraiwut/ Xiaoshuang Yin | 02/20 | 02/24 | ItemSearch Request |
| Database test | Test whether “JDBC” class could accurately parse the input XML file and successfully put parsing result into database. | Fang Qi/ Xiaoshuang Yin | 02/20 | 02/24 | Implementation of Amazon API |
| Crawler and Htmlparsing test | Test whether “LinguisticAnalyzer” could successfully extract every level pages’ URL and all the reviews on pages. | Shengxin Qian/ Tananun Songdechakraiwut | 02/20 | 02/24 | Implementation of Amazon API/ ItemSearch Request |
| Keywords set test | Test the frequency of each keyword. Get rid of elusive keywords. Compare the sentiment analysis result with star rating to verify its’ accuracy. | Shengxin Qian | 02/22 | 02/24 | Htmlparsing |

Sprint 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Product search UI | Create product name and keywords input box with web application frame. Link input box with “AWSRequest” class. | Xiaoshuang Yin/ Tananun Songdechakraiwut | 02/24 | 03/09 | Sprint1 result |
| Search result UI | Create multi products display frame. Design layout, background color of frame and shape of control objects | Xiaoshuang Yin/ Tananun Songdechakraiwut | 03/09 | 03/16 | Fully functional Linguistic Analyzer |
| Remote access | Set up database for remote access. | Fang Qi | 02/24 | 03/09 | Sprint1 result |
| Fully functional Linguistic Analyzer | Using “Naïve Bayes Classifier” to analyze linguistic sentiment based on pre-defined word sets. | Shengxin Qian | 02/24 | 03/09 | Sprint1 result |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| UI test | Test whether UI design is consistent with user requirements. | Tananun Songdechakraiwut/  Shengxin Qian | 03/03 | 03/09 | Product search UI/Search result UI |
| Remote access test | Test whether Web client could successfully access to database on server | Fang Qi/  Xiaoshuang Yin | 03/09 | 03/16 | Remote access |
| Fully functional Linguistic Analyzer test | Test analyzer accuracy with untested reviews. Adjust linguistic feature sets and classifier parameter to achieve higher accuracy. | Shengxin Qian | 02/24 | 03/09 | Fully functional Linguistic Analyzer |

Sprint 2 test

Sprint 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Multithread crawler and Htmlparsing | Create multiple threads to search product reviews html files with HttpClient 4.1 library and extract reviews with HttpParse. | Shengxin Qian/Fang Qi | 03/16 | Unknown | Sprint2 result |

Sprint 3 test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Product search and analysis speed result | Test whether program could return product information and analysis result in several seconds. Adjust the number of products and the number of reviews each time to meet up with required access speed. | Shengxin Qian/Fang Qi | 03/16 | Unknown | Multithread crawler and Htmlparsing |

Final system test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task ID | Description | Developer | Start | Finish | Dependencies |
| Web UI test | Test whether the UI design is intuitive. Adjust the UI design during test. | Xiaoshuang Yin/ Tananun Songdechakraiwut | 03/16 | Unknown | Sprint3 result |
| Database | Use pressure test to test the remote connection stability of database and improve database’s stability. | Fang Qi | 03/16 | Unknown | Sprint3 result |
| Product Request test | Test whether program could return required products and the suggested products could meet up user’s requirements. | Fang Qi/  Shengxin Qian | 03/16 | Unknown | Sprint3 result |