**Group 2: Interface Control Document**

**Current Document Revision: 3**

**Currency Exchange Program – Exchange!**

**Reginald Carey, Jason Dudash, Robert Kibler, Brandon Trexler**

**University of Maryland: University College**

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**Revision History Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision Number** | **Date** | **Description** | **Name** |
| **1** | **Apr 14, 2016** | **Initial Document** | **Robert Kibler** |
| **2** | **Apr 17, 2016** | **Addition of Database Information** | **Brandon Trexler** |
| **3** | **April 17, 2016** | **Added GUI Information** | **Reggie Carey** |
|  |  |  |  |
|  |  |  |  |

# ICD for ExchangeRateWebService Subsystem

Data between ExchangeRateWebService and finance.yahoo.com

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| CurrencyCodes | Stream | UTF-8 Char | N/A |

Data between ExchangeRateWebService and CurrencyConversionLogic

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| CurrencyCodes | List<CurrencyCode> | 0-180 objects | Empty List |
| FromRate | String | 3 char string | “” |
| ToRate | String | 3 char string | “” |
| ReturnRate | Double | 0 – 1.7x10^308 | 0 |

# ICD for ExchangeRateDB Subsystem

Data from ExchangeRateWebService to ExchangeRateDB

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| AllRates | List<AllRates> | 0-180 objects | Empty List |

Data between ExchangeRateDB and CurrencyConversionLogic

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| CurrencyCodes | List<CurrencyCode> | 0-180 objects | Empty List |
| getRate | Double | 0-1.7x10^308 | 0 |
| getUpdateTime | String | 2^31-1 | “” |

# ICD for GUI Subsystem

Data between User and GUI

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| SourceCurrencyCode | String | 3 Letter String | USD |
| TargetCurrencyCode | String | 3 Letter String | None |
| SourceCurrencyAmount | Double | 0-Double.MAXVAL | 0.0 |
| SourceCurrencyName | String | String | United States Dollar |
| TargetCurrencyName | String | String | None |
| TargetCurrencyAmount | String | String | None |
| NotificationMessage | String | String | None |
| CurrencyRate | Double | 0-Double.MAXVAL | None |

Data between GUI and Database

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| CurrencyCodes | List<CurrencyCode> | 0-180 objects | Empty List |
| CurrencyRate | Double | 0-Double.MAXVAL | None |
| CurrencyDate | Date | 0-Long.MAXVAL | None |
|  |  |  |  |
|  |  |  |  |

Data between GUI and CurrencyConversionLogic

|  |  |  |  |
| --- | --- | --- | --- |
| **NAME** | **TYPE** | **Value Range** | **Default Value** |
| SourceCurrencyCode | String | 3 Letter String | None |
| TargetCurrencyCode | String | 3 Letter String | None |
| SourceCurrencyAmount | Double | 0 – Double.MAXVAL | None |
| TargetCurrencyAmount | Double | 0 – Double.MAXVAL | None |
|  |  |  |  |