



CSA 3060 – Introduction to Internet Tech. Course Assignment 2003-2004

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Developing the Infrastructure for a Currency Conversion Web Service

Aim:	The aim of this assignment is to develop the infrastructure for a publicly available web service that provides us with the translation of monetary values from one currency to another.
Technologies:	Web services, database technologies, dynamic server pages.
Functionality:	<p>The functionality exposed should include:</p> <ol style="list-style-type: none">1. A simple front-end website that allows guest users to register to the currency conversion web service. Users must register their user name and password to use the web service. This requires a simple database containing the list of guest users.2. A web service that exposes at least one web method that provides the conversion service ¹.3. The database behind the web service must contain a table containing the conversion rates from one currency to another ².4. A special administration web service will allow users with administrative rights to:<ol style="list-style-type: none">a. Query a currency (i.e. return the conversion rate given a source currency and a target currency).b. Update a currency (i.e. change the conversion rate for a given source/target currency).5. Each guest user can call the conversion service not more than 100 times in a span of 24 hours.6. Each publicly exposed web method must throw a meaningful exception on failure which is caught on the client-side.7. The system must also include a simple client that uses the services. You will actually need to implement two clients:<ol style="list-style-type: none">a. A guest client to demonstrate the conversion.b. An administrative client to demonstrate the querying and updating of the conversion rates.

Notes:

1. The prototype of the web method *could* be:

```
decimal convert(  
    string guestName,  
    string guestPassword,  
    decimal v,  
    string tgtCurrency  
)
```

2. Currencies are identified using a 3-letter code. For example MTL=Malta Liri, USD=US Dollars.
- The program must be accompanied by a technical report describing any implementation details and techniques used to complete the assignment.
 - Refer to the assignment instructions at <http://webster.cs.um.edu.mt/kguil/assignment.html>