

# Sun Java Challenge Tamagotchi

Jonathan Jones, Stuart Harland, Daniel Stoner,  
Jason Allen, Stephen Jenkins, Anthony Chattalas

March 13, 2007

## 1 Abstract

*We have designed a base template for a Tamagotchi Virtual pet. Included in this are the GUI and the base environment classes.*

## 2 Introduction

The Tamagotchi is a handheld digital pet created in 1996 by Aki Maita[1]. The idea is to look after the pet as you would a regular pet, by feeding it, playing with it and other functions. The pet lives on a time delay requiring attention over an extended period.

## 3 Tasks

The main ideas in our task are to embellish upon the current base implementation, extending where possible.

Some thoughts on what you can do with this follow.

### 3.1 XML

XML fast becoming one of the most important web technologies, used to transmit semi-human-readable information across the internet. Java 6, improves two methods of handling XML in Java; JAXP - which is a Java XML parser technology, and JAXB - which is a far more complicated, but thus more powerful, method of converting Java classes directly to and from XML.

Use Java6's JAXB or JAXP libraries to implement a persistent state for the Tamagotchi using the provided Tamagotchi API[2].

### 3.2 Moods

The Tamagotchi in the provided code changes state, or "mood" based on a number of statistics, or metrics. Implement more metrics, or clean up the current set of metrics.

### 3.3 Actions

The Tamagotchi in the provided code has a number of actions which are displayed in a toolbar at the top of the application. Implement as many other actions as you feel able, the original Tamagotchi included play, feed, punish, and reward actions. This may work well with the previous section.

### 3.4 Freedom

You may also do your own thing, should you feel inspired. The code we have written is Java 1.5 compliant and feel free to edit it as you wish.

## References

- [1] Wikipedia Entry, *Tamagotchi*, <http://en.wikipedia.org/wiki/Tamagotchi>, accessed March 12, 2007
- [2] Sun Java Documentation, *Using JAXB*, <http://java.sun.com/webservices/docs/1.5/tutorial/doc/JAXBUsing2.html>