Japanese HWR

Steven B. Poggel
steven.poggel@gmail.com

January 24, 2010

Contents

Chapter 1

Technical Design of the Application

The focus of this chapter is on the general architectural choices made during the development of the system. In this chapter, the technical design aspects of the application are described. The general system architecture is layed out in section 1.1. It contains the global view on the software architecture in section 1.1.1, the data flow in within the system in section 1.1.2 and describes the design of the individual modules in section 1.1.3. Section 1.2 describes the technical set-up and framework choices. However, the handwriting recognition engine is described in detail in a separate section (see chapter **??**).

1.1 System Architecture

The system architecture of the Kanji Coach follows the requirements of an e-learning environment dealing with the specific difficulties for learners of the Japanese script (see chapter **??**) and those of an on-line handwriting recognition. Techniques of handwriting recognition are reviewed in chapter **??**. The general requirements of an e-learning application are presented in chapter **??**. The resulting specific conceptual design choices have been layed out in chapter **??**.

1.1.1 Global Architecture

1.1.2 System Data Flow

1.1.2.1 Communication

1.1.2.2 Recognition Data Flow

1.1.2.3 Learning Data Flow

1.1.3 Software Modules

1.1.3.1 Mobile GUI

1.1.3.2 Desktop GUI

1.1.3.3 Web Service

1.1.3.4 Recognition Module

1.1.3.5 Learning Module

1.2 Framework and Devices

1.2.1 Operating System

1.2.2 Framework

.NET vs. Java etc.

1.2.3   Desktop Computer

1.2.4   Pen Input Device

1.2.4.1   Stylus Input

List of Figures

List of Tables

References