



The Gong Project

A Voice for the Web World



Gong – a Voice for the Web World

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Introduction

- The Gong system is
 - a web-based voice tool designed for web based audio communication
 - primarily used for language learning
 - a voice board system where people can leave voice and text messages using the Internet



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Gong Board - T01

User: csgibson Board: T01 Gong v5.1.0C

Compose Find Help Reply Edit Delete Change Quit

Board List

- Fall 2007 - LANG001 (0)
- Practise Here (125)
- T01 (17)
- T02 (17)
- T03 (19)
- T04 (20)
- T05 (20)
- T06 (22)
- T07 (18)
- T08 (19)
- T09 (20)
- T10 (22)
- T11 (19)
- T12 (21)
- T13 (20)

Board Messages

- Richard's Speaking Task from XU, Zhiji 6 Nov 2007 23:34 (03:30)
- First Assessed speaking Task from SUN, Bowen 6 Nov 2007 21:06 (04:05)
- LANG001 Task 1 from XU, Lingda 6 Nov 2007 20:14 (03:52)
- Hao's first speaking task from FU, Hao 6 Nov 2007 21:06 (03:59)
- First speaking task from LUO, Yuhui 6 Nov 2007 18:37 (03:40)
- speaking task1 from LI, Yunzi 6 Nov 2007 17:11 (04:10)
- Zhu weiming-task1 from ZHU, Weiming 7 Nov 2007 08:49 (03:51)
- He Yingying-Task 1 from HE, Yingying 6 Nov 2007 13:57 (03:53)
- Speaking Task 1 from LUO, Yaqing 6 Nov 2007 10:08 (03:56)

Play Pause Stop Analyze Save

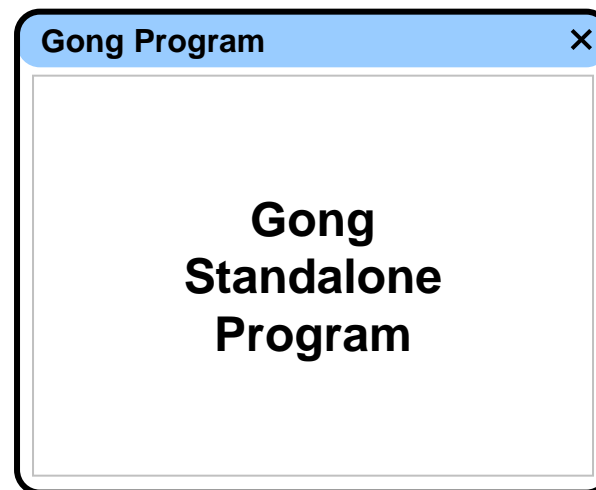
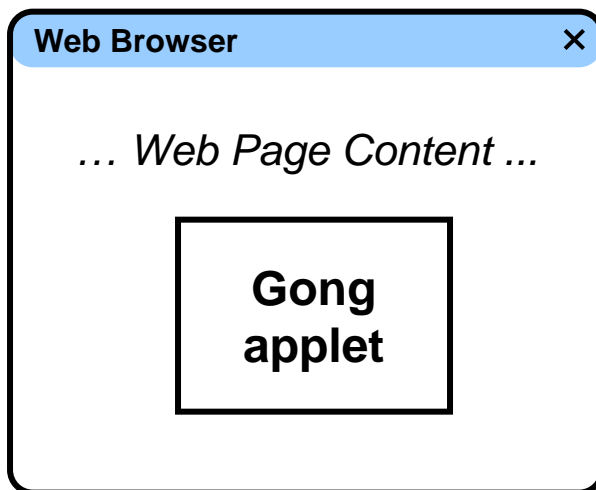
Time (sec): 00:00 Speed: Normal Normal Speed

Max. Time: 03:30 00:00.000 01:44.313 03:30.382



Gong Usage

- Gong can be used in two ways
 - As an applet
 - As a standalone program





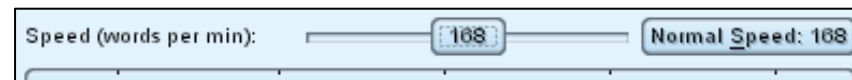
Advanced Features of Gong

- A number of advanced features have been developed
 - Playback speed control
 - Audio indexing
 - Recordable chat
 - Pinyin and Yale input
 - Multiple language interface
 - Web resource menu

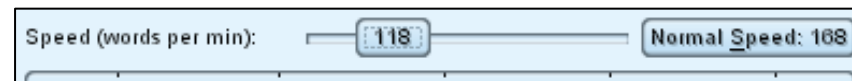


Playback Speed Control

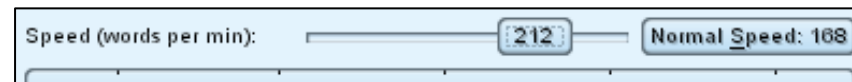
- Speed up/slow down
 - The speed of the voice playback can be adjusted interactively
 - Based on a words per minute measure



Play at Normal Speed (168 wpm)



Play at a Slower Speed (118 wpm)



Play at a Faster Speed (212 wpm)



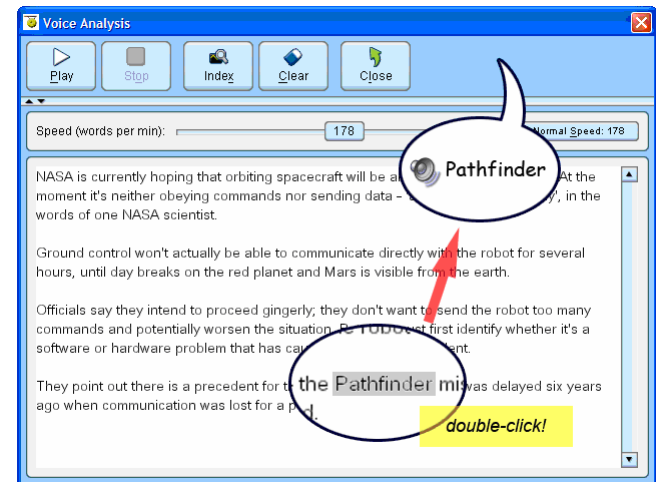
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Audio Indexing

- Given a transcription of a speech the system can automatically match the words to their spoken counterparts
- Word/phrase can then be selectively playback





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Recordable Chat

- People can talk to each other on the Internet through the use of Gong
- The conversation as well as the individual speech of each participant can be recorded





Pinyin and Yale Input

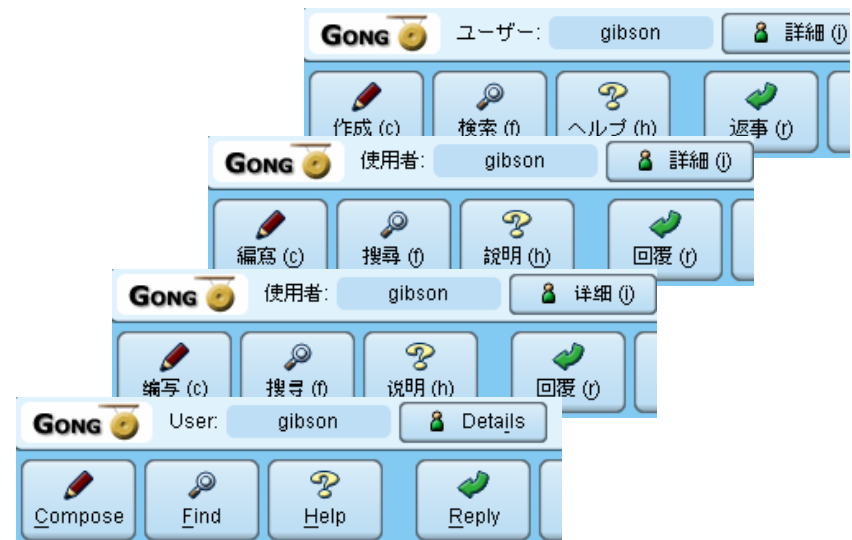
- Unique features for Chinese learning
 - Comprehensive support for the Pinyin and Yale system by a user friendly interface

The screenshot displays the software's recording interface. At the top, there is a control bar with a 'Display Mode' dropdown set to 'Tones with Lines'. Below this, a recording progress bar shows 'Time (sec): 00:00' and 'Max. Time: 00:00'. The main area contains two overlapping text boxes. The top box shows the Pinyin 'jiang3 xi4tong3 zhi1yuan2 han4yu3pin1yin1 de5 shu1ru4 ji2 xian3shi4' above the Chinese characters '講系統支援漢語拼音的輸入及顯示'. The bottom box shows the same text in Yale Pinyin: 'jiǎng xìtǒng zhīyuán hànǔpīnyīn de shūrù jí xiǎnshì' above the Chinese characters '講系統支援漢語拼音的輸入及顯示'. A 'Normal Speed' button and a volume icon are visible on the right side of the interface.



Multiple Language Interface

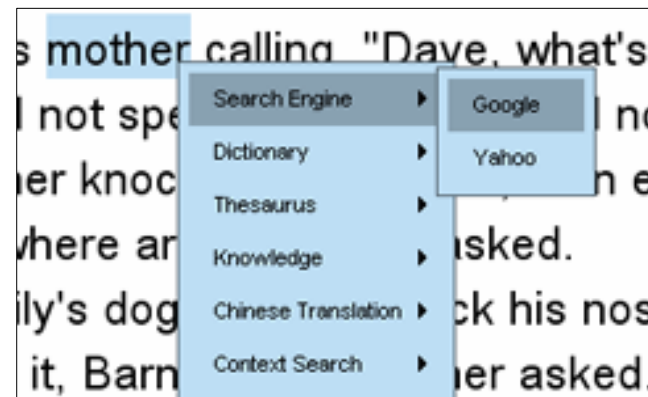
- Gong can operate in different languages
 - The language can be changed at any time
 - Available languages
 - American/British English
 - Traditional Chinese
 - Simplified Chinese
 - Japanese





Web Resource Menu

- Web resource menu provides context aware information for message text
 - Information is displayed in a browser
 - Fully configurable menu settings





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Integration into Other Systems

- Pluggable module for LMS
 - A module is developed for 'Moodle', the most popular open source learning management system

The screenshot shows a Moodle course page for 'English for Engineering Students'. The page displays a discussion forum post titled 'Building Houses That Are Healthier for People and the Planet' by user LANG206. The post contains four audio parts, each with a duration and a download link. Below the audio parts is an audio player interface with play, pause, stop, and analyze buttons, a progress bar, and a speed control. The text of the post is visible below the audio player.



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Integration into Other Systems

- Use of Gong through an API
 - Programmers can develop web pages which contain features of Gong

Old MacDonald Had a Farm

MOO
MEOW
OINK
NEIGH

QUACK
CUCK
BAA
WOOF

Let's sing!

Sing normally
Sing as slow as a snail
Sing as fast as a rocket

Secret

Old MacDonald had a farm, E-I-E-I-O
And on this farm he had a cow, E-I-E-I-O
With a moo moo here and a moo moo there
Here a moo, there a moo, everywhere a moo moo
Old MacDonald had a farm, E-I-E-I-O
Old MacDonald had a farm, E-I-E-I-O



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Podcasting

- Gong voice board can operate as a podcast
 - Voice messages can be accessed through portable devices





NanoGong

- A visually simple applet
 - Does not require any server installation
 - Allows record, playback and saving of voice message on web pages
 - Simple playback speed control





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Interest in Gong

- It Is Free!
 - Gong is released free on the web (<http://gong.ust.hk>) since July 2006
- More than **1000** downloads and **85,500** users from all over the world

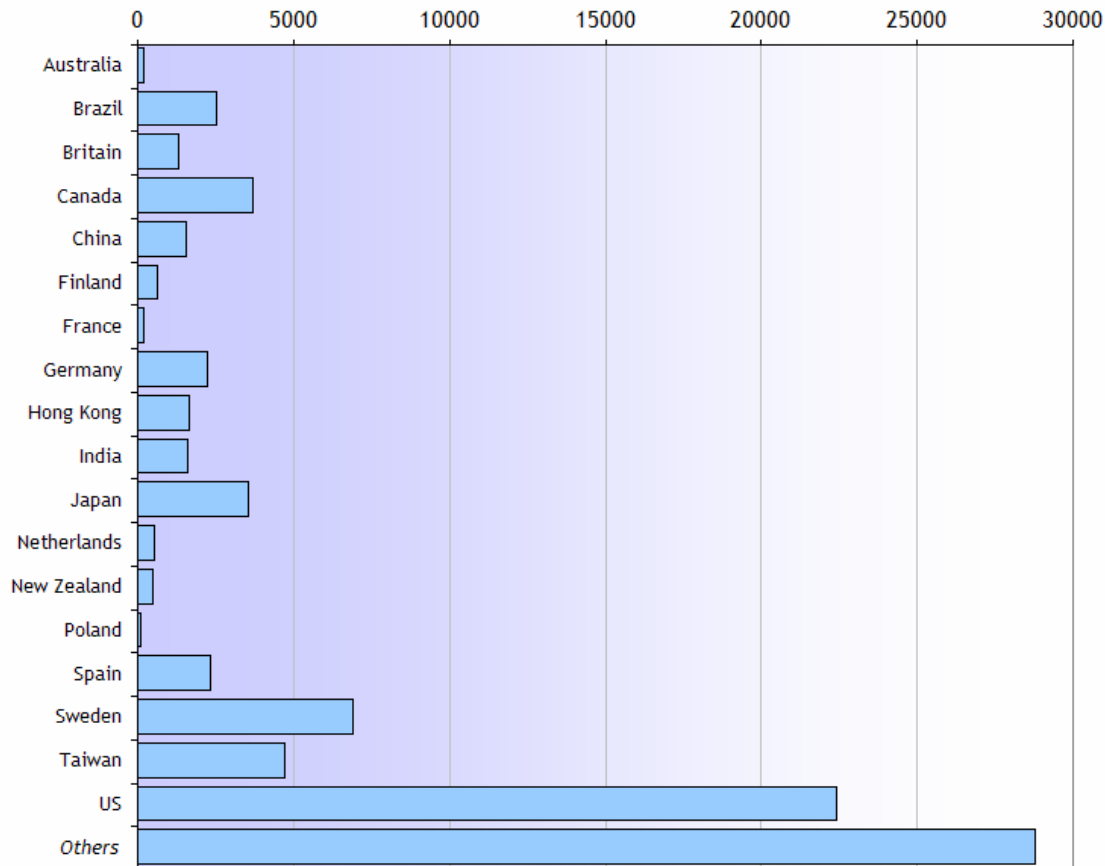


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Approximate Number of Gong Users Around the World





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Conclusion

- We have developed a web based communication tool, the Gong system
- The system has been used in HKUST for several years, primarily for language learning
- Since released free tremendous interest has been shown from around the world



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Thank you!

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