

OS Project 10C

Implementation of Hindi TTS on Cell Broadband Engine (CBE)

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March 14, 2013

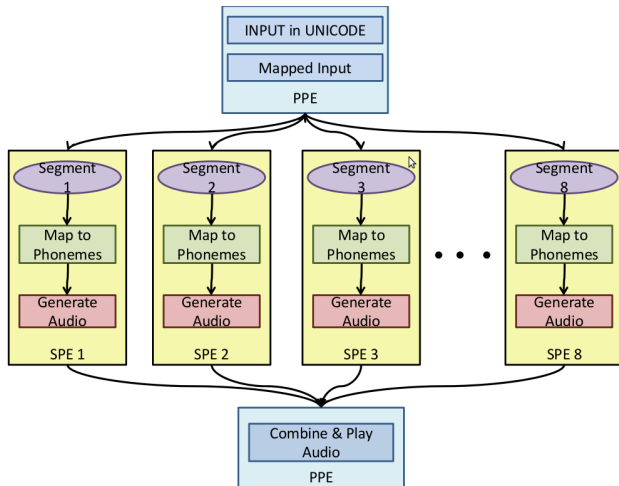
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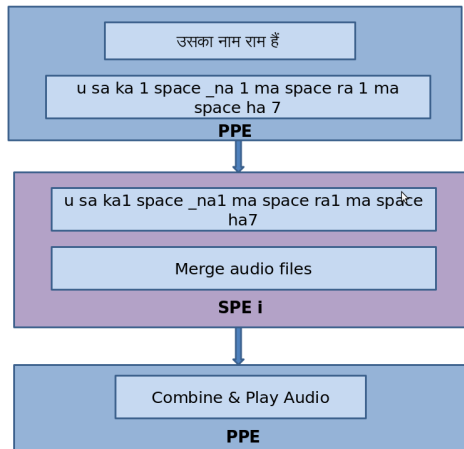
Work done so far

- Installed the Cell SDK and simulator.
- Setup the PS3 system.
- Recorded Speech database.
- Implemented the TTS on our x86 architecture.
- Implemented the TTS system on Cell PPE on PS3.

Architecture



Sample Run



Results - Speech Output

- Setup the Database of 300+ sound units.
- Achieved voice output for a variety of Inputs.

Challenges faced

- Lack of a JVM for heterogenous multicore architecture.
- IBM has withdrawn support for CBE.
- Difficulty in finding sound library in C.

Further work to be done

- Parallelizing the process on CBE
- Measuring Performance Gain.

THANK YOU