Encoder

input_file: stroutput_file: str

+ Encoder(input, output): void

+ build_lexicon(SaplingNode): Mapping

- encode(): void

- build_frequency(filename): Heap

- build tree(heap: Heap): SaplingNode

Decoder

input_file: stroutput_file: strlexicon: Mapping

+ Decoder(lexicon, input_file, output_file): void

+ Decoder(input_file, output:file): void

+ decode(): void

get_lexicon(): Mappingwrite_lexicon(): voidparse_encoding(): void

- write(): void

TreeBuilder <<Static struct>>

+ saplings: Heap

+ build(): SaplingNode

SaplingNode

key: stringvalue: int

left_child: SaplingNoderight child: SaplingNode

+ SaplingNode(): void + get_key(): string + get_value(): int

+ get_left_child(): SaplingNode + get_right_child(): SaplingNode