Wasm runtimes

Wasm features depend on runtime implementations

Wasm runtimes

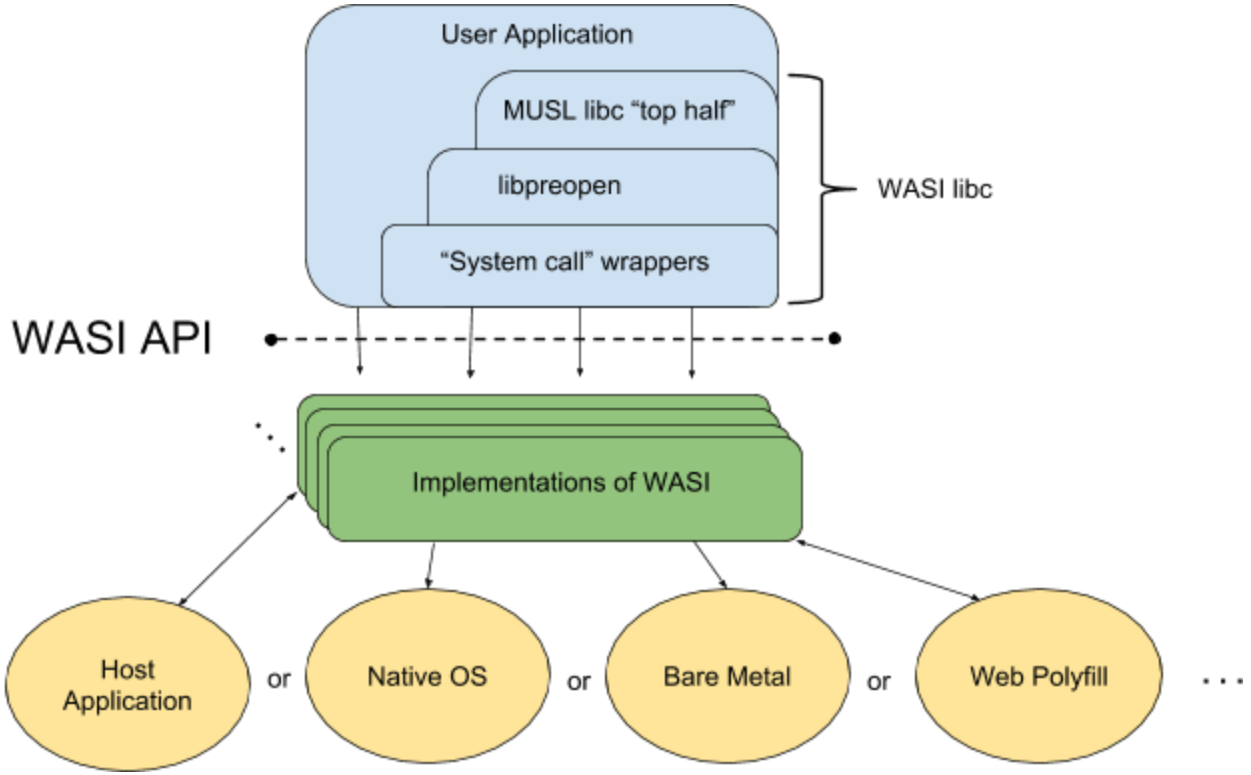
Wasm features depend on runtime implementations

```
262       ;;; Move the offset of a file descriptor.
263       ;;; Note: This is similar to `lseek` in POSIX.
264       (@interface func (export "fd_seek")
265         (param $fd $fd)
266         ;;; The number of bytes to move.
267         (param $offset $filedelta)
268         ;;; The base from which the offset is relative.
269         (param $whence $whence)
270         ;;; The new offset of the file descriptor, relative to the start of the file.
271         (result $error (expected $filesize (error $errno)))
272       )
```

WASI-LIBC

- We already talked about quite a few of the compilation steps
- Clang with WASI-SDK compiles the C code into LLVM IR and LLVM applies optimizations to the IR
- LLVM IR is then lowered to Wasm instructions
- Object files generated are linked together using the LLD linker
- Linker links the program with wasi-libc, ensuring that standard library functions used in the C code are properly implemented

WASI-LIBC



Source: WASI-libc

Wasm Runtimes

- Parsing and Validation
- Compile
- Execute