Appendix B – Jai keywords:

## Reserved Keywords and Identifiers

This is a list of keywords and identifiers available in the Jai Programming Language. This list is subject to change while the programming language is still inside the closed beta.

The list of reserved keywords is rather short, because Jai tries to achieve a lot by leveraging compile-time typechecking and focusing on solving hard problems, rather than simply adding syntax sugar that solves easy problems.

| **Keywords** | **Purpose** |
| --- | --- |
| **bool, true, false** | boolean keywords |
| **int, s8, u8, s16, u16, s32, u32, s64, u64, s128, u128** | integers |
| **float, float32, float64** | float point numbers |
| **void** | Just like C, it means nothing, and when used in void\*, means a pointer to anything |
| **enum, enum\_flags** | enums and enum\_flags keyword |
| **size\_of** | used to get the size of a type. To use it on a variable, do size\_of(type\_of(variable)). |
| **struct, using, union** | Keywords denoting a record with multiple data members |
| **string** | Denotes a string of characters such as "John Newton" |
| **type\_of** | used to get the type of something. |
| **cast** | used to cast a variable to a different type. For example, b := cast(int)a. |
| **if, ifx, then, else, case** | if statement and branching keywords |
| **for, while** | Looping and control flow statements |
| **break, continue, remove** | Used to for control flow within a loop |
| **return** | Returns from a function |
| **inline** | Inlining a function (no function call is needed after inlining) |
| **null** | A pointer that points to nothing |
| **defer** | Similar to the Go Language. This statement is executed at the closing of a code block. |
| **xx** | Autocast |

The following identifiers are not reserved: function, assert, exit, it and it\_index.