

```

+-----+
|   ColorConfig   |
+-----+
| - filename: str  |
| - primary: str   |
| - off: str       |
+-----+
| + __init__(filename="colors.json") |
| + is_valid_hex(color: str): bool   |
| + load_colors(): void               |
+-----+

```



| used by

```

+-----+
|   UVSimGUI      |
+-----+
| - root: Tk       |
| - sim: UVSim     |
| - load: Load_Program |
| - colors: ColorConfig |
| - memory_entries: list[Entry] |
| - output_lines: list[str] |
| - file_loaded: bool   |
| - run_button: Button  |
| - mem_canvas: Canvas  |
| - accumulator_var: StringVar |
+-----+
| + __init__(root: Tk)                |
| + build_widgets(): void              |
| + load_file(): void                 |
| + save_file(): void                 |
| + save_memory_entry(index: int, value: str) |
| + sync_entries_to_memory(): bool      |
| + run_program(): void               |
| + step_through_program(): void       |
| + show_read_popup(operand: int): int  |
| + update_memory_display(): void       |
| + update_output(): void              |
| + clear_output(): void               |
| + open_file_in_new_window(): void     |
+-----+

```



| uses|

```

+-----+
|   UVSim   |
+-----+
| - cpu: CPU |

```



| has-a

```

+-----+
| Load_Program |
+-----+
| - memory: Memory

```

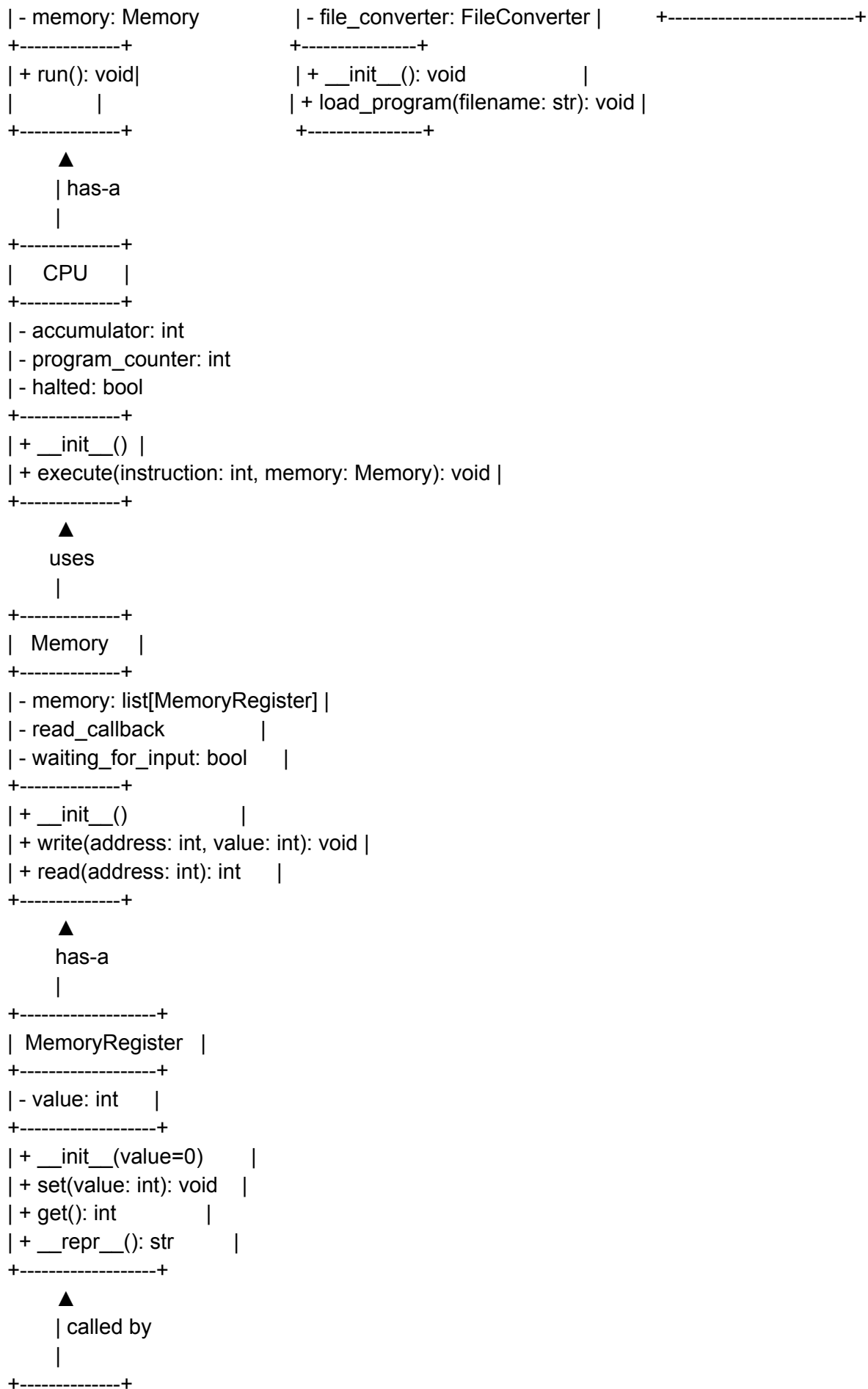


| uses|

```

+-----+
|   Convert   |
+-----+
| + convert_to_int(word): int or False |

```



```
| main.py |  
+-----+  
| + main(): void |  
+-----+
```