## **The Section Header Table**

.symtab

.text

All sections in object files can be found using the Section header table. The section header, similar to the program header, is an array of structures. Each entry correlates to a section in the file. The entry provides the name, type, memory image starting address (if loadable), file offset, the section's size in bytes, alignment, and how the information in the section should be interpreted. Figure 2.8 details the specific fields of the structure. The name provided in the structure is actually an index into the string table (a section in the object file) where the actual string representation of the name of the section exists. Sections will be discussed further below.

Figure: Special Sections. A brief description of sections that can appear in an ELF

object file. Names of sections Description of the section Uninitialized Data present in process image .bss .comment Version control information .data and .data1 Initialized data present in process image .debug Information for symbolic debugging .dynamic Dynamic linking information Strings needed for dynamic linking .dynstr .dynsym Dynamic linking symbol table Process termination code .fini Global offset table .got Symbol hash table .hash Process initialization code .init .interp Path name for a program interpreter .line Line number information for symbolic debugging File notes .note .plt Procedure linkage table .relname and .relaname Relocation Information .rodata and .rodata1 Read-only data .shstrtab Section names Usually names associated with symbol table entries .strtab

Symbol Table

Executable instructions

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