

Summary Page: Typedefs, Structs and Unions

CISC 220, fall 2012

Typedefs:

With these typedefs:

```
typedef int idType
typedef char *String
```

The following definitions:

```
idType id;
String name;
```

mean the same thing as:

```
int id;
char *name;
```

Examples of Structs:

```
struct personInfo {
    char name[100];
    int age;
};
```

```
// this line:
```

```
struct personInfo mickey = {"Mickey", 12};
```

```
// does the same as these three lines:
```

```
struct personInfo mickey;
strcpy(mickey.name, "Mouse");
mickey.age = 13;
```

Combining Structs and Typedefs:

```
typedef struct {
    char name[100];
    int age;
} Person;
```

```
Person mickey;
mickey.age = 15;
```

Unions:

```
union identification {
    int idnum;
    char name[100];
};
```

```
union identification id;
```

```
// id may contain an integer (id.idnum) or a name (id.name)
```

```
// but not both.
```