

tax_base

- ny_tax_rate : double
- ss_tax_rate : double

- + tax_base(ny : double, ss : double)
- + ~tax_base()
- + tax_withheld(gross_pay : double) : double = 0
- + get_ny_tax_rate() : double
- + get_ss_tax_rate() : double

employee

-emp_record

```
{ emp_id: int  
  name: string  
  address: string  
  phone: string  
  hours_wk: double  
  rate_of_pay: double  
}
```

- rec: emp_record

- first_name_basic(s: string): string

+ employee()

+ employee(emp_id: int, name: string,
 address: string, phone: string,
 hrs_wk: double, rate_of_pay: double,
 ny: double, ss: double)

+ get_emp_id(): int

+ get_name(): string

+ get_address(): string

+ get_phone(): string

+ get_hrs_wk(): double

+ get_rate_of_pay(): double

+ get_first_name(): string

+ to_padded_id(id_num: int, width: int): string

```
+ gross_pay(): double
+ employee_ss_tax(gross: double): double
+ employer_ss_tax(gross: double): double
+ tax_withheld(gross_pay: double): double
+ net_pay(): double
+ print_paycheck(out_file: ostream&,
                  id_width: int): void
+ print_sorted_row(out_file: ostream&,
                   id_width: int): void
```

business

-emp_lookup: map<int, employee>

-employees: vector<employee>

+business(ny: double, ss: double)

+tax_withheld(gross_pay: double): double

+load_from_combined_file(filename: string): bool

+sort_by_first_name(): void

+find_by_id(emp_id: int): employee*

+total_gross(): double

+total_ny_tax(): double

+total_employee_ss(): double

+total_employer_ss(): double

+total_net(): double

+print_sorted_report(out_file: ostream&,
id_width: int): void

+write_sorted_report(out_file: ostream&,
id_width: int): bool

+print_all_checks(out_file: ostream&,
id_width: int): void

+print_summary_sheet(out_file: ostream&): void