OOP HOMEWORK 4 (23 сентября 2015 г.)

Tropin Andrew
e-mail: andrewtropin@gmail.com
github: abcdw

Problem 1. Class is a description of set of objects with similiar properties.
Class like a baking pan and object like a pie, baked with that pan.

Problem 2.

- STRING_8
- REAL_64
- REAL_64

Queries:

- Zurich.line(13).color.brightness
- Zurich.line(31).stations.at(3).item.position.y
- Zurich.line(31).next.station(Zurich.station(“Loewenplatz”), Zurich.line(31).west_terminal)
- Zurich.station("Paradeplatz").lines.count
- Zurich.connecting_lines(Zurich.station(“Paradeplatz”), Zurich.station(“Rennweg”)).has(Zurich.lin

Problem 3.

```
        BUSINESS_CARD

create
        fill_in

feature {NONE} -- Initialization

        fill_in
                        -- Fill in the card and print it.
                do
                        io.put_string ("Your name:")
            io.read_line
                        set_name(io.last_string)
                        io.put_string ("Your job:")
                        io.read_line
                        set_job(io.last_string)
                        io.put_string ("Your age:")
                        io.read_integer
                        set_age(io.last_integer)
                        print_card
                end
```

```
feature -- Access

	name: STRING
			-- Owner's name.

	job: STRING
			-- Owner's job.

	age: INTEGER
			-- Owner's age.

feature -- Setting

	set_name (a_name: STRING)
			-- Set `name' to `a_name'.
		require
			name_exists: a_name /= Void
		do
			name := a_name.twin
		end

	set_job (a_job: STRING)
			-- Set `job' to `a_job'.
		require
			job_exists: a_job /= Void
		do
			job := a_job.twin
		end

	set_age (a_age: INTEGER)
			-- Set `age' to `a_age'.
		require
			age_non_negative: a_age >= 0
		do
			age := a_age
		end

feature -- Output
	age_info: STRING
			-- Text representation of age on the card.
		do
			Result := age.out + " years old"
		end

	Width: INTEGER = 50
			-- Width of the card (in characters), excluding borders.
```

Tropin Andrew
e-mail: andrewtropin@gmail.com
github: abcdw

```
        line (n: INTEGER): STRING
                        -- Horizontal line on length ‘n’.
                do
                        Result := "#"
                        Result.multiply (n)
                end

        spaces (n: INTEGER): STRING
                        -- Spaces in card
                do
                        Result := " "
                        Result.multiply (Width - n - 2)
                end

        print_card
                        -- Printing card
                do
                        io.put_string(line (Width))
                        io.put_new_line
                        io.put_string ("#" + name.out + spaces(name.count) + "#")
                        io.put_new_line
                        io.put_string ("#" + job.out + spaces(job.count) + "#")
                        io.put_new_line
                        io.put_string ("#" + age_info + spaces(age_info.count) + "#")
                        io.put_new_line
                        io.put_string(line(Width))

                end


end
```

Problem 4. You can find me. Andrew Tropin.

Tropin Andrew
e-mail: andrewtropin@gmail.com
github: abcdw