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package inputManagePackage;

import java.io.FileInputStream;

public abstract class InputSystem {

    protected static final int EMAIL_TAG_LENGTH = 7;
    protected static final int WORK_TEL_TAG_LENGTH = 18;
    protected static final int HOME_TEL_TAG_LENGTH = 18;
    protected static final int ADDRESS_TAG_LENGTH = 9;
    protected static final int NAME_TAG_LENGTH = 6;
    protected Scanner inputStream = null;
    protected Scanner checkStream = null;
    protected int checkIfSection = 0;
    protected int notSkipLine = 0;
    protected ArrayList<Section> inputCvTemplateSectionObj = new
ArrayList<Section>();

    public InputSystem() {
        super();
    }

    public void addCvDataFromFile(int index, String filePath, int
minRequiredNumberOfLines, int generalInfoEndTagLength)
        throws ParseException {

        initScanners(filePath);

        if (hasOnlyGeneralInformation(minRequiredNumberOfLines) == true)
            return;

        skipLines();

        CVTemplate cvtemplate = createTemplateWithGeneralInfo
(generalInfoEndTagLength);

        readCVSections(cvtemplate);

        inputStream.close();
        checkStream.close();

        templateTypeSilentIdentifier(cvtemplate);
        Database.addCVtemplateToList(cvtemplate);

    }

    protected void initScanners(String filePath) {
        try {
            inputStream = new Scanner(new FileInputStream(filePath));
            checkStream = new Scanner(new FileInputStream(filePath));
        } catch (FileNotFoundException e) {
            System.out.println("Problem opening file.");
            System.exit(0);
        }
    }
}

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protected boolean hasOnlyGeneralInformation(int minRequiredNumberOfLines) {
    int i = 0;
    while (checkStream.hasNextLine() && checkStream.nextLine().length() >
0) {
        i++;
        checkStream.nextLine();
    }

    if (i < minRequiredNumberOfLines) {
        JOptionPane.showMessageDialog(null, "Invalid input file. Reached
eof while on General Info.");
        return true;
    }

    return false;
}

abstract protected void skipLines();

protected CVTemplate createTemplateWithGeneralInfo(int
generalInfoEndTagLength) {
    final String name = inputStream.nextLine();
    String applicantName = name.substring(NAME_TAG_LENGTH, name.length() -
generalInfoEndTagLength);
    final String address = inputStream.nextLine();
    String applicantAddress = address.substring(ADDRESS_TAG_LENGTH,
address.length() - generalInfoEndTagLength);
    final String homeTel = inputStream.nextLine();
    String applicantHomeTelephone = homeTel.substring(HOME_TEL_TAG_LENGTH,
homeTel.length() - generalInfoEndTagLength);
    final String workTel = inputStream.nextLine();
    String applicantWorkTelephone = workTel.substring(WORK_TEL_TAG_LENGTH,
workTel.length() - generalInfoEndTagLength);
    final String email = inputStream.nextLine();
    String applicantEmail = email.substring(EMAIL_TAG_LENGTH, email.length
() - generalInfoEndTagLength);

    CVTemplate cvtemplate = new CVTemplate(applicantName, applicantAddress,
applicantHomeTelephone,
        applicantWorkTelephone, applicantEmail);
    return cvtemplate;
}

void readCVSections(CVTemplate cvtemplate) throws ParseException {
    int sectionCounter = 0;
    String checkEoF = null;

    while (inputStream.hasNextLine()) {

        if (notSkipLine == 0) {
            checkEoF = inputStream.nextLine();
        }

        notSkipLine = 0;

        if (checkEoF(checkEoF))

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InputSystem.java

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        break;
    inputCvAddSection(sectionCounter, cvtemplate);
}
}

protected abstract boolean checkEoF(String checkEoF);

protected abstract void inputCvAddSection(int sectionCounter, CVTemplate
cvtemplate) throws ParseException;

public int templateTypeSilentIdentifier(CVTemplate cvtemplate) {
    int checkForFunctional = 0;
    int checkForChronological = 0;
    int checkForCombined = 0;

    for (int i = 0; i < cvtemplate.getNumberOfSectionObj(); i++) {

        if (cvtemplate.getSectionObjTitle(i).equals("Skills and
Experience:")) {
            checkForFunctional++;
            checkForCombined++;
        } else if (cvtemplate.getSectionObjTitle(i).equals("Career
Summary:")) {
            checkForFunctional++;

        } else if (cvtemplate.getSectionObjTitle(i).equals("Professional
Experience:")) {
            checkForChronological++;
            checkForCombined++;
        } else if (cvtemplate.getSectionObjTitle(i).equals("Core
Strengths:")) {
            checkForChronological++;

        }

    }

    if (checkForChronological != 2 && checkForCombined != 2 &&
checkForFunctional == 2) {
        return 0;
    } else if (checkForChronological == 2 && checkForCombined != 2 &&
checkForFunctional != 2) {
        return 1;
    } else if (checkForChronological != 2 && checkForCombined == 2 &&
checkForFunctional != 2) {
        return 2;
    } else {
        return -1;
    }

}
}
```