

CISC 327 Assignment 5 Report

Create Service

The Spice Girls (Group 13)

Natasha Djurdjevic

Allan Legemaate

Megan McClure

Irena Dunjic

Create Service

Code Sections:

```
//
// SERVICES.java
// Lines 159 - 198
try {
    // Create date object
    Date serviceDate = new Date(splitLine[5]); // Goes to DATE.java

    // Ensure service does not exist
    int serviceNumber = Integer.parseInt(splitLine[1]); // Goes to FINDSERVICE method

    if (findService(serviceNumber) != null) {
        throw new InvalidInputFileException("Error: Invalid Central Service File.");
    }

    // Create service object
    serv = new Service(serviceNumber, 30, 0, splitLine[4], serviceDate); // Goes to SERVICE.java
}
catch (NumberFormatException e) {
    br.close();
    System.out.println(e.getMessage());
    throw new InvalidInputFileException("Error: Invalid Central Service File.");
}
addService(serv);

// Lines 341 - 350
// Find service
public static Service findService(int serviceNum) {
    int i = 0;
    while (i < serviceList.size()) {
        if (serviceList.get(i).getNumber() == serviceNum) {
            return serviceList.get(i);
        }
        i++;
    }
    return null;
}

//
// DATE.java
//
// From date constructor
if (date.length() != 8) {
    throw new InvalidDateFormatException("Error: Invalid date format.");
}

// Year
if (year < 1980) {
    throw new InputOutOfRangeException("Error: Year must be above 1979.");
}
```

```

    }
    if (year > 2999) {
        throw new InputOutOfRangeException("Error: Year must be below 2999.");
    }
    this.year = year;

    // Month
    if (month < 1 || month > 12) {
        throw new InputOutOfRangeException("Error: Month out of range.");
    }
    this.month = month;

    // Day
    if (day < 1 || day > 31) {
        throw new InputOutOfRangeException("Error: Day out of range.");
    }
    this.day = day;

    //
    // SERVICE.java
    // Lines 96 - 188
    // Validate service number
    if (number < 10000) {
        throw new InputOutOfRangeException("Error: Service number must be above 9999.");
    }
    if (number > 99999) {
        throw new InputOutOfRangeException("Error: Service number must be below 100000.");
    }
    this.number = number;

    // Validate name
    // Cannot start or end with spaces
    if (name.trim().length() != name.length()) {
        throw new InvalidServiceNameException("Service name cannot start or end with whitespace.");
    }

    // Cannot be less than 3 characters
    if (name.length() < 3) {
        throw new InvalidServiceNameException("Service name must be at least 3 characters.");
    }

    // Cannot be greater than 39 characters
    if (name.length() > 39) {
        throw new InvalidServiceNameException("Service name can not be greater than 39 characters.");
    }

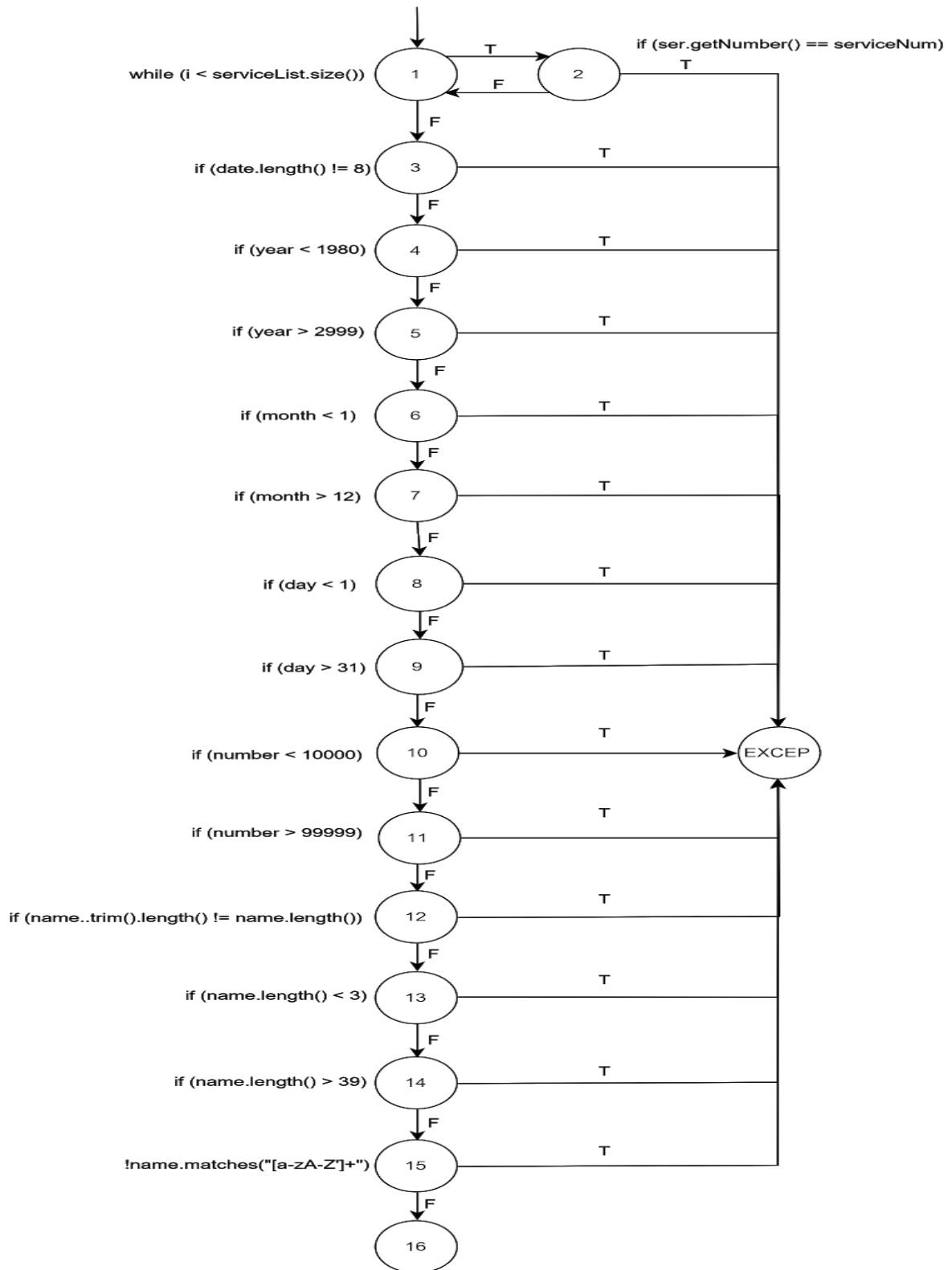
    // Cannot contain anything but letters and '
    if (!name.matches("[a-zA-Z0-9 ']+")) {
        throw new InvalidServiceNameException("Service name can not contain characters other than alpha and ' .");
    }
}

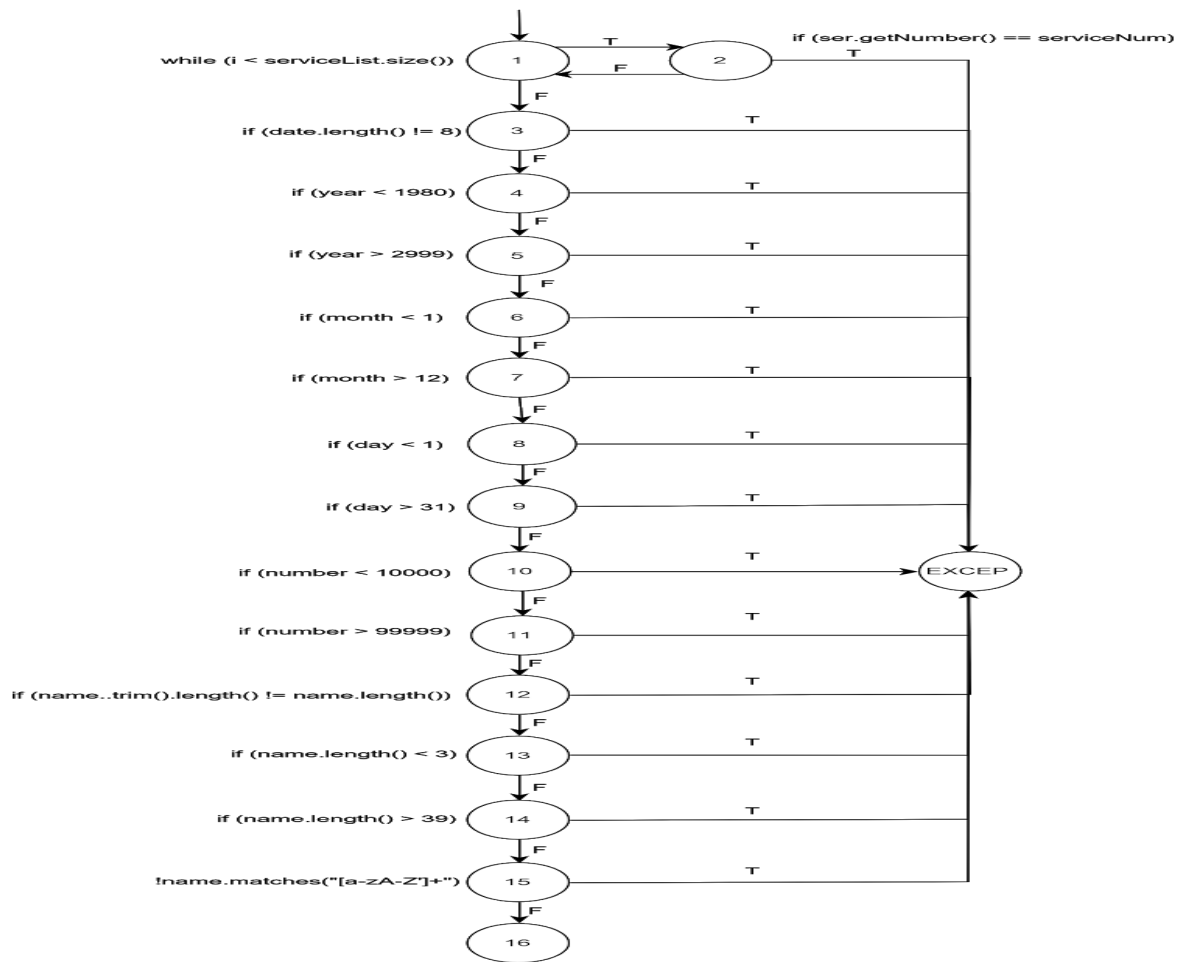
```

```
this.name = name;
```

Method: Path Testing

Analysis of Test Cases:





Test Inputs:

Test	Input (tsf.txt without EOS)	Path

1	CRE 10000 0 00000 TEST 19991010 CRE 10001 0 00000 TEST 19991010 CRE 10001 0 00000 TEST 19991010	1,2,1,2,EXCEP
2	CRE 10000 0 00000 TEST 1999101	1,3,EXCEP
3	CRE 10000 0 00000 TEST 19791010	1,3,4,EXCEP
4	CRE 10000 0 00000 TEST 30001010	1,3,4,5,EXCEP
5	CRE 10000 0 00000 TEST 19990010	1,3,4,5,6,EXCEP
6	CRE 10000 0 00000 TEST 19991310	1,3,4,5,6,7,EXCEP
7	CRE 10000 0 00000 TEST 19991000	1,3,4,5,6,7,8,EXCEP
8	CRE 10000 0 00000 TEST 19991032	1,3,4,5,6,7,8,9,EXCEP
9	CRE 9999 0 00000 TEST 19991010	1,3,4,5,6,7,8,9,10,EXCEP
10	CRE 100000 0 00000 TEST 19991010	1,3,4,5,6,7,8,9,10,11,EXCEP
11	CRE 10000 0 00000 TEST 19991010	1,3,4,5,6,7,8,9,10,11,12,EXCEP
12	CRE 10000 0 00000 TE 19991010	1,3,4,5,6,7,8,9,10,11,12,13,EX CEP
13	CRE 10000 0 00000 TESTADDFESISISMCKDLFLSLSLSLSLS LSLSLSLSLS 19991010	1,3,4,5,6,7,8,9,10,11,12,13,14, EXCEP
14	CRE 10000 0 00000 TEST+ 19991010	1,3,4,5,6,7,8,9,10,11,12,13,14,1 5,EXCEP
15	CRE 10000 0 00000 TEST 19991010	1,3,4,5,6,7,8,9,10,11,12,13,14,1 5,16

Test Report:

Test	Result	Fix
1	SUCCESS	-

2	SUCCESS	-
3	SUCCESS	-
4	SUCCESS	-
5	SUCCESS	-
6	SUCCESS	-
7	SUCCESS	-
8	SUCCESS	-
9	SUCCESS	-
10	SUCCESS	-
11	SUCCESS	-
12	SUCCESS	-
13	SUCCESS	-
14	SUCCESS	-
15	FAILURE	Expected output date was incorrect. This was a test issue, replacing 19991212 with the proper 19991010 fixed the issue.