Debugging ApproachesDebugging software under testBy; Paul Gichure@GichureMkenya

Introduction• Debugging is a methodical process of finding and reducing the number of bugs, or defects, in a computer sy...

Debugging Vs Testing• Debugging is carried out by the development team (or developer), after getting the test report from...

Debugging Approaches • Brute Force Method • Back Tracking Method • Cause Elimination • Each of the above debugging app...

1. Brute Force Method• most common and least efficient for isolating the cause of a software error.• a printout of all re...

2. Back Tracking Method• It is a quite popular approach of debugging which is used effectively in case of small applicati...

3. Cause Elimination• manifested by induction or deduction and introduces the concept of binary partitioning• data relate...

Thank you

Debugging Approaches

Debugging Approaches

- Share
- Like
- Download
- ...
  -

Paul Gichure
Paul Gichure, JAVA EE Software Developer
Follow

Published on Dec 5, 2012

Debugging is carried out by the development team (or developer), after getting the test report from the testing team about defect(s)
It is a methodical process of finding and reducing the number of bugs, or defects, in a computer system (Software, hardware or a combination), thus making it behave as expected.

...
Published in: Technology

- 0 Comments
- 12 Likes
- Statistics
- Notes

- Full Name
  Full Name
  Comment goes here.
  12 hours ago Delete Reply Block
  Are you sure you want to Yes No
  Your message goes here

no profile picture user
Share your thoughts…
Post

- *Be the first to comment*

- SantoshSingh507
  Santosh Singh , Attended Microtek college of management & technology varanasi
  1 month ago
- EmilShaju
  Emil Shaju
  2 months ago
- SaiSumanth44
  Sai Sumanth , Student at BVC College of Engineering, Palacharla, Rajanagaram Mandal, PIN-533104(CC-6M)
  2 months ago
- AakankshaRajputRajput
  Aakanksha Rajput Rajput
  5 months ago
- PREETY95
  Preethi 7 , Student at KG college of arts and science

7 months ago

Show More
No Downloads
Views
Total views
18,688
On SlideShare
0
From Embeds
0
Number of Embeds
4
Actions
Shares
0
Downloads
514
Comments
0
Likes
12
Embeds 0
No embeds
No notes for slide

Debugging Approaches

1. 1. Debugging ApproachesDebugging software under testBy; Paul Gichure@GichureMkenya
2. 2. Introduction• Debugging is a methodical process of finding and reducing the number of bugs, or defects, in a computer system (Software, hardware or a combination), thus making it behave as expected.• Process; – to start with a problem – isolate the source of the problem – and then fix it
3. 3. Debugging Vs Testing• Debugging is carried out by the development team (or developer), after getting the test report from the testing team about defect(s)• The purpose of testing is to show that the software works, OR doesn't work, with intention to increase SW quality
4. 4. Debugging Approaches • Brute Force Method • Back Tracking Method • Cause Elimination • Each of the above debugging approaches can be supplemented with debugging tools such as debugging compilers, dynamic debugging aids, automatic test case generators, memory dumps and cross reference maps.
5. 5. 1. Brute Force Method• most common and least efficient for isolating the cause of a software error.• a printout of all registers and relevant memory locations is obtained and studied. All dumps should be well documented and retained for possible use on subsequent• involves using the debugger to step across the code from start to finish until you notice something odd.
6. 6. 2. Back Tracking Method• It is a quite popular approach of debugging which is used effectively in case of small applications.• The process starts from the site where a particular symptom gets detected, from there on backward tracing is done across the entire source code till we are able to lay our hands on the site being the cause.• Unfortunately, as the number of source lines increases, the number of potential backward paths may become unmanageably large.
7. 7. 3. Cause Elimination• manifested by induction or deduction and introduces the concept of binary partitioning• data related to the error occurrence are organized to isolate potential causes.• a "cause hypothesis" is devised and the data are used to prove or disprove the hypothesis. Alternatively, a list of all possible causes is developed and tests are conducted to eliminate each. If initial tests indicate that a particular cause hypothesis shows promise, the data are refined in an attempt to isolate the bug.
8. 8. Thank you

Recommended

- Software Testing (ppt file)
  Software Testing (ppt file)
  Softwarecentral
- PPT
  PPT
  Softwarecentral
- 10_Testing_Strategies.ppt
  10_Testing_Strategies.ppt
  Softwarecentral
- Microsoft PowerPoint - GUI Testing-Tutorial(Lab Seminar)
  Microsoft PowerPoint - GUI Testing-Tutorial(Lab Seminar)
  Softwarecentral
- Basis path testing
  Basis path testing
  Hoa Le
- Real time Scheduling in Operating System for Msc CS
  Real time Scheduling in Operating System for Msc CS
  Thanveen
- Types of Software Testing
  Types of Software Testing
  Nishant Worah

Enter email addresses

Add a message

From

Send

Email sent successfully..

Link

Public clipboards featuring this slide

×

No public clipboards found for this slide

Select another clipboard

×

Looks like you've clipped this slide to already.

Search for a clipboard

Create a clipboard

You just clipped your first slide!

Clipping is a handy way to collect important slides you want to go back to later. Now customize the name of a clipboard to store your clips.

Name* Best of Slides

Description Add a brief description so oth

Visibility

Others can see my Clipboard

Cancel Save