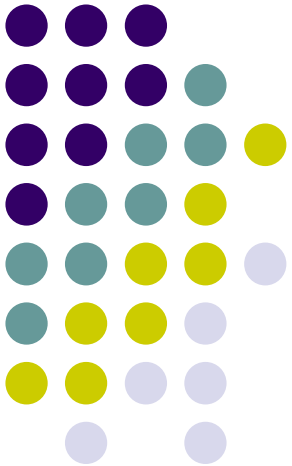
ຄະນະວິທະຍາສາດທຳມະຊາດ
ພາກວິຊາ ວິທະຍາສາດຄອມພິວເຕີ

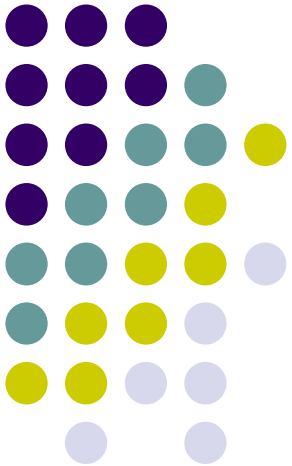
ຄວາມປອດໄພເວບໄຊ
(Web Security)



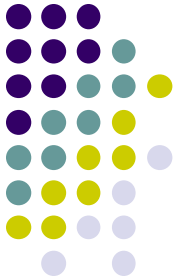
ສອນໂດຍ: ອຈ ເພັດ ສອນວິໄລ
ມືຖື: 020 58390300
ອີເມວ: p.sonevilay@nuol.edu.la

ບົດທີ7

ການປ້ອງກັນການບຸກໂຈມຕີດ້ວຍ SQL-Injection

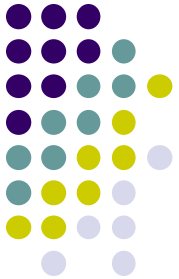


ເນື້ອໃນໂດຍລວມ



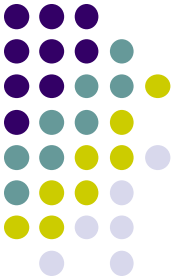
- ແນວຄວາມຄິດການປ້ອງກັນ
- ວິທີການປ້ອງກັນ

ແນວຄວາມຄິດການປ້ອງກັນ



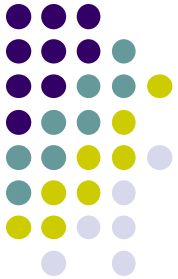
- ອີງໃສ່ຈຸດອ່ອນຂອງໂປຣແກຣມ(Application Vulnerability)
  - ການຮັບຂໍ້ມູນຈາກຜູ້ໃຊ້ (Input Validation)
  - ການນຳໃຊ້ SSL
  - ການນຳໃຊ້ HTML forms
  - ການນຳໃຊ້ Cookies
  - ການນຳໃຊ້ HTTP REFERER Header
  - ການນຳໃຊ້ POST & GET method
  - ວິທີການເຂົ້າສູ່ ແລະ ອອກຈາກລະບົບ(Login and logout machanism)
  - ການສະແດງຂໍ້ຜິດພາດ(Error Handling)

ວິທີການປ້ອງກັນ



- ການປ້ອງກັນການປ້ອນຂໍ້ມູນຈາກຜູ້ໃຊ້ (Input Validation)
  - ນຳໃຊ້ຄຳສັ່ງ ກວດສອບການປ້ອນຂໍ້ມູນ ເຊັ່ນວ່າ:
    mysql_real_escape_string(),
    mysqli_real_escape_string(), trim(), stripslashes().
  - ນຳໃຊ້ຊຸດຄຳສັ່ງໃນການຕິດຕໍ່ຖານຂໍ້ມູນດ້ວຍ PDO ຫຼື mysqli

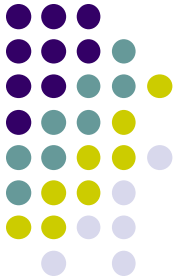
ວິທີການປ້ອງກັນ



- ຕົວຢ່າງ: ການກວດສອບການປ້ອນຂໍ້ມູນຈາກຜູ້ໃຊ້

```
function check_userinput($data)
{
   $data = trim($data);//
   $data = stripslashes($data);
   $data=mysqli_real_escape_string($conn,$data);
return $data;
}
```

ວິທີການປ້ອງກັນ



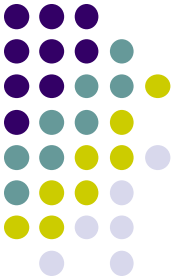
- ຕົວຢ່າງ: ການນຳໃຊ້ mysqli prepare statement

```
$stmt = $conn->prepare("INSERT INTO user(firstname, lastname, email) VALUES (?, ?, ?)");
$stmt->bind_param("sss", $firstname, $lastname, $email);
```

ໝາຍເຫດ:

i - integer
d - double
s - string
b - BLOB

ວິທີການປ້ອງກັນ



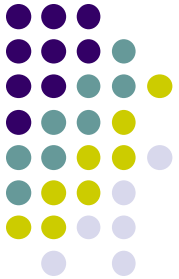
- ຕົວຢ່າງ: ການນຳໃຊ້ PDO prepare statement

```
$stmt = $conn->prepare("INSERT INTO user (firstname,
lastname, email)
    VALUES (:firstname, :lastname, :email)");
    $stmt->bindParam(':firstname', $firstname);
    $stmt->bindParam(':lastname', $lastname);
    $stmt->bindParam(':email', $email);
```

ຂໍ້ມູນອ້າງອີງ

[1] J.D. Meier, Alex Mackman, Michael Dunner, Srinath Vasireddy, Ray Escamilla and Anandha Murukan. Improving Web Application Security, Microsoft Corporation, 2013

[2] ການປ້ອງກັນ ແລະ ຮັກສາຄວາມປອດໄພເຄືອຂ່າຍ, www.mict4u.net



ຖາມ ແລະ ຕອບ

ຂອບໃຈ